



RIGOL

EMI Mode

For RSA800 Series Spectrum

Programming Guide
2026.08

Guaranty and Declaration

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Document Overview

This document is intended to guide users in programmatically controlling the RSA800 Series Spectrum Analyzers (EMI modes) with SCPI commands via remote interfaces.

The spectrum analyzer can communicate with a computer over USB and LAN interfaces.

Tip

For the latest version of this manual, download it from the official website of RIGOL (<http://www.rigol.com>).

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Software upgrade might change or add product features. Please acquire the latest version of the manual from RIGOL website or contact RIGOL to upgrade the software.

Format Conventions in this Manual

1. Key

The front panel key is denoted by the menu key icon. For example,  indicates the "System" key.

2. Menu

The menu item is denoted by the format of "Menu Name (Bold) + Character Shading" in the manual. For example, Setup indicates clicking or tapping the "Setup" sub-menu under the "System" menu to view the basic system settings.

3. Operation Procedures

The next step of the operation is denoted by ">" in the manual. For example,  > **Save** indicates that first clicking or tapping the icon , then clicking or tapping Save.

Content Conventions in this Manual

The RSA800 series spectrum analyzers consist of the following models. Unless otherwise specified, this manual uses the RSA814 as an example to describe the SCPI commands supported by the RSA800 series under EMI mode.

Model	Frequency	RF Input Port	TG Output Port
RSA804	5 kHz ~ 4.5 GHz	1, Type-N (F)	1, Type-N (F)
RSA808	5 kHz ~ 8.5 GHz	1, Type-N (F)	1, Type-N (F)
RSA814	5 kHz ~ 14 GHz	1, Type-N (F)	1, Type-N (F)

Command System

This chapter introduces the commands of the RSA800 series spectrum analyzer in EMI mode.

:CALCulate Commands

:CALCulate:MARKer<n>:MODE

Syntax

```
:CALCulate:MARKer<n>:MODE <mode>
:CALCulate:MARKer<n>:MODE?
```

Description

Sets the type of the specified marker.
Queries the type of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<mode>	Discrete	POSition DELTA FIXed OFF	OFF

Remarks

POSition: indicates the normal marker.
DELTA: indicates difference between two data points.
FIXed: indicates that the marker is fixed.
OFF: turns off the selected marker.
The PVT only supports setting the marker on Trace 1.

Return Format

The query returns POS, DELT, FIX, or OFF.

Example

The following command sets the type of Marker 1 to Position.
:CALCulate:MARKer1:MODE POSition

The following query returns POS.
:CALCulate:MARKer1:MODE?

:CALCulate:MARKer<n>:REference

Syntax

```
:CALCulate:MARKer<n>:REference <integer>
:CALCulate:MARKer<n>:REference?
```

Description

Sets the reference marker for the specified marker.
Queries the reference marker for the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<integer>	Integer	1 to 8	By default, the reference marker is the marker next to it.

Remarks

Each marker can have another marker to be its reference marker.
 If the current marker is a Delta marker, the measurement result of the marker will be determined by the reference marker.
 Any marker cannot have itself to be the reference marker.
 The PVT only supports setting the marker on Trace 1.

Example

The following command sets the reference marker for Marker 1 to 2.
 :CALCulate:MARKer1:REFerence 2

The following query returns 2.
 :CALCulate:MARKer1:REFerence?

:CALCulate:MARKer<n>:X**Syntax**

:CALCulate:MARKer<n>:X <param>
 :CALCulate:MARKer<n>:X?

Description

Sets the marker frequency of the specified marker.
 Queries the marker frequency of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—
<param>	Real	0 Hz to $F_{\max}$	515 MHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the frequency of the specified marker in scientific notation.

Example

The following command sets the frequency of Marker 1 to 515 MHz.
 :CALCulate:MARKer1:X 515000000

The following query returns 5.150000000e+08.
 :CALCulate:MARKer1:X?

Return Format

The query returns the X-axis value of the marker in scientific notation.

Example

The following command sets the X-axis value of Marker 1 to 150 MHz (the readout mode is frequency).
 :CALCulate:MARKer1:X 150000000

The following query returns 1.500000000e+08.
 :CALCulate:MARKer1:X?

:CALCulate:MARKer<n>:X:POSITION

Syntax

:CALCulate:MARKer<n>:X:POSition <index>
 :CALCulate:MARKer<n>:X:POSition?

Description

Sets the X-axis position of the trace at the specified marker.
 Queries the X-axis position of the trace at the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<index>	Integer	--	--

Return Format

The query returns the X-axis position of the trace at the specified marker in integer.

Example

The following command sets the X-axis position of the trace at Marker 1 to 100.
 :CALCulate:MARKer1:X 100

The following query returns 100.
 :CALCulate:MARKer1:X?

:CALCulate:MARKer<n>:Y**Syntax**

:CALCulate:MARKer<n>:Y <amp>
 :CALCulate:MARKer<n>:Y?

Description

Sets the Y-axis value of the specified marker.
 Queries the Y-axis value of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<amp>	Real	—	--

Remarks

This setting command is only available when there is only one marker and its marker mode is Fixed.
 If the marker mode of the specified marker is Delta, the query command queries the Y-axis difference between the reference marker and the Delta marker.

Return Format

The query returns the Y-axis value of the specified marker in scientific notation. The unit is dBμV.

Example

The following command sets Y-axis value at Fixed Marker 1 to -59.6 dBm.
 :CALCulate:MARKer1:Y -59.6

The following query returns -5.960000000e+01.
 :CALCulate:MARKer1:Y?

:CALCulate:MARKer<n>:MAXimum

Syntax

:CALCulate:MARKer<n>:MAXimum

Description

Performs one peak search based on the search mode set by the *:CALCulate:MARKer:PEAK:SEARCh:MODE* command and marks it with the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one peak search, and marks with Marker 2.

:CALCulate:MARKer2:MAXimum

:CALCulate:MARKer<n>:MAXimum:LEFT

Syntax

:CALCulate:MARKer<n>:MAXimum:LEFT

Description

Searches for and marks the nearest peak which is located at the left side of the current peak and meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one left peak search, and marks with Marker 2.

:CALCulate:MARKer2:MAXimum:LEFT

:CALCulate:MARKer<n>:MAXimum:NEXT

Syntax

:CALCulate:MARKer<n>:MAXimum:NEXT

Description

Searches for and marks the peak whose amplitude on the trace is next to that of the current peak and which meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one next peak search, and marks with Marker 2.
:CALCulate:MARKer2:MAXimum:NEXT

:CALCulate:MARKer<n>:MAXimum:RIGHT**Syntax**

:CALCulate:MARKer<n>:MAXimum:RIGHT

Description

Searches for and marks the nearest peak which is located at the right side of the current peak and meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one right peak search, and marks with Marker 2.
:CALCulate:MARKer2:MAXimum:RIGHT

:CALCulate:MARKer<n>:MINimum**Syntax**

:CALCulate:MARKer<n>:MINimum

Description

Searches for and marks the peak with the minimum amplitude on the trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one minimum search, and marks it with Marker 2.
:CALCulate:MARKer2:MINimum

:CALCulate:MARKer<n>:LINEs[:STATE]**Syntax**

:CALCulate:MARKer<n>:LINEs[:STATE] <bool>
:CALCulate:MARKer<n>:LINEs[:STATE]?

Description

Enables or disables the marker line of the specified marker.
Queries the setting state for the marker line of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<bool>	Bool	OFF ON 0 1	OFF 0

Remarks

If the marker is not visible in the selected area, enable the marker line function to extend the marker line to the display area for better observation.

Return Format

The query returns 0 or 1.

Example

The following command enables the marker line of Marker 1.

:CALCulate:MARKer1:LINes:STATe ON or :CALCulate:MARKer1:LINes:STATe 1

The following query returns 1.

:CALCulate:MARKer1:LINes:STATe?

:CALCulate:MARKer<n>:TRACe**Syntax**

:CALCulate:MARKer<n>:TRACe <integer>

:CALCulate:MARKer<n>:TRACe?

Description

Sets the marker trace for the specified marker.

Queries the marker trace for the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<integer>	Discrete	1 2 3	1

Remarks

<integer> indicates the marker trace, and its range is from Trace 1 to Trace 3. The selected trace must be enabled.

You can also run the **:CALCulate:MARKer<n>:TRACe:AUTO** command to set the marker trace of the specified marker to "Auto".

Only when the parameter <integer> is set to 7, can you set the marker trace in PVT view of RTSA mode. At this time, "PVT Trace1" is selected as the marker trace.

Return Format

The query returns any integer ranging from 1 to 7. If the marker trace is set to "Auto", the query command returns a trace number on which the marker is placed.

Example

The following command sets the marker trace of Marker 1 to Trace 2.

:CALCulate:MARKer1:TRACe 2

The following query returns 2.

:CALCulate:MARKer1:TRACe?

:CALCulate:MARKer<n>:TRACe:AUTO

Syntax

:CALCulate:MARKer<n>:TRACe:AUTO <bool>
:CALCulate:MARKer<n>:TRACe:AUTO?

Description

Enables or disables the auto trace marking of the specified marker.
Queries the status of the auto trace marking of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<bool>	Bool	OFF ON 0 1	ON 1

Remarks

When you disable the auto marking of the trace, the currently enabled marker will stay on the corresponding trace.

Return Format

The query returns 0 or 1.

Example

The following command sets the marker trace of Marker 1 to be Auto.

:CALCulate:MARKer1:TRACe:AUTO ON or :CALCulate:MARKer1:TRACe:AUTO 1

The following query returns 1.

:CALCulate:MARKer1:TRACe:AUTO?

:CALCulate:MARKer:PEAK:THReshold

Syntax

:CALCulate:MARKer:PEAK:THReshold <ampl>
:CALCulate:MARKer:PEAK:THReshold?

Description

Sets the peak threshold.
Queries the peak threshold.

Parameter

Name	Type	Range	Default
<ampl>	Real	-93.01 dBμV to 106.99 dBμV	16.99 dBμV

Return Format

The query returns the peak threshold in scientific notation. Its default unit is dBμV.

Example

The following command sets the peak threshold to -100 dB.

:CALCulate:MARKer:PEAK:THReshold -100

The following query returns -1.000000e+02.

:CALCulate:MARKer:PEAK:THReshold?

:CALCulate:MARKer:PEAK:THReshold:STATe

Syntax

:CALCulate:MARKer:PEAK:THReshold:STATe <bool>

:CALCulate:MARKer:PEAK:THReshold:STATe?

Description

Sets the peak threshold state.

Queries the peak threshold state.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak threshold function.

:CALCulate:MARKer:PEAK:THReshold:STATe ON or :CALCulate:MARKer:PEAK:THReshold:STATe 1

The following query returns 1.

:CALCulate:MARKer:PEAK:THReshold:STATe?

:CALCulate:MARKer:PEAK:THReshold:LINE:STATe

Syntax

:CALCulate:MARKer:PEAK:THReshold:LINE:STATe <bool>

:CALCulate:MARKer:PEAK:THReshold:LINE:STATe?

Description

Sets the status of the threshold line.

Queries the status of the threshold line.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak threshold line.

:CALCulate:MARKer:PEAK:THReshold:LINE:STATe
or :CALCulate:MARKer:PEAK:THReshold:LINE:STATe 1

ON

The following query returns 1.

:CALCulate:MARKer:PEAK:THReshold:LINE:STATe?

:CALCulate:MARKer:PEAK:EXCursion

Syntax

:CALCulate:MARKer:PEAK:EXCursion < amp>

:CALCulate:MARKer:PEAK:EXCursion?

Description

Enables or disables the peak excursion.
Queries the excursion of the peak.

Parameter

Name	Type	Range	Default
<ampl>	Real	0 dB to 100 dB	6 dB

Return Format

The query returns the peak excursion in scientific notation. The unit is dB.

Example

The following command sets the peak excursion to 12 dB.

```
:CALCulate:MARKer:PEAK:EXCursion 12
```

The following query returns 1.200000e+01.

```
:CALCulate:MARKer:PEAK:EXCursion?
```

:CALCulate:MARKer:PEAK:EXCursion:STATe**Syntax**

```
:CALCulate:MARKer:PEAK:EXCursion:STATe <bool>
```

```
:CALCulate:MARKer:PEAK:EXCursion:STATe?
```

Description

Enables or disables the peak excursion.
Queries the on/off state of the peak excursion.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak excursion function.

```
:CALCulate:MARKer:PEAK:EXCursion:STATe ON or :CALCulate:MARKer:PEAK:EXCursion:STATe 1
```

The following query returns 1.

```
:CALCulate:MARKer:PEAK:EXCursion:STATe?
```

:CALCulate:MARKer:PEAK:SEARch:MODE**Syntax**

```
:CALCulate:MARKer:PEAK:SEARch:MODE <mode>
```

```
:CALCulate:MARKer:PEAK:SEARch:MODE?
```

Description

Sets the peak search mode.
Queries the peak search mode.

Parameter

Name	Type	Range	Default
<mode>	Discrete	PARAmeter MAXimum	MAXimum

Remarks

PARAmeter: indicates parameter. If "parameter" is selected under search mode, the system will search for the peak of the specified parameter on the trace.

MAXimum: indicates maximum. If Max is selected under Search Mode, the system will search for the maximum value on the trace.

The command is only valid for the peak search executed by sending the **:CALCulate:MARKer<n>:MAXimum** command. Other items under the peak search menu such as Next Peak, Next Peak Right, Next Peak Left, and Minimum Peak are all searched based on "Config" (parameter).

Return Format

The query returns PAR or MAX.

Example

The following command sets the peak search mode to be "Para".

```
:CALCulate:MARKer:PEAK:SEARch:MODE PARAmeter
```

The following query returns PAR.

```
:CALCulate:MARKer:PEAK:SEARch:MODE?
```

:CALCulate:MARKer:AOff**Syntax**

```
:CALCulate:MARKer:AOff
```

Description

Turns off all the enabled markers.

:CALCulate:MARKer:COUPle[:STATe]**Syntax**

```
:CALCulate:MARKer:COUPle[:STATe] <bool>
```

```
:CALCulate:MARKer:COUPle[:STATe]?
```

Description

Sets the marker coupling state.

Queries the on/off state of the marker coupling.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Remarks

When you enable the couple marker function, moving any marker will make other markers (that are not fixed or off) move along with it.

Return Format

The query returns 0 or 1.

Example

The following command disables the couple marker function.

```
:CALCulate:MARKer:COUPle:STATe OFF or :CALCulate:MARKer:COUPle:STATe 0
```

The following query returns 0.
:CALCulate:MARKer:COUPle:STATe?

:CALCulate:MARKer:COUPle:METER

Syntax

:CALCulate:MARKer:COUPle:METER <bool>
:CALCulate:MARKer:COUPle:METER?

Description

Enables or disables coupling to marker in meter control.
Queries whether coupling to marker in meter control.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command disables coupling to marker in meter control.
:CALCulate:MARKer:COUPle:METER OFF or :CALCulate:MARKer:COUPle:METER 0

The following query returns 0.
:CALCulate:MARKer:COUPle:METER?

:CALCulate:MARKer:NEXT

Syntax

:CALCulate:MARKer:NEXT

Description

Moves to the next marker.

:CALCulate:LLINe:TEST[:STATe]

Syntax

:CALCulate:LLINe:TEST[:STATe] <bool>
:CALCulate:LLINe:TEST[:STATe]?

Description

Enables or disables the limit line test.
Queries the on/off state of the limit line test.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables or disables the limit line test.

:CALCulate:LLINe:TEST:STATe ON or :CALCulate:LLINe:TEST:STATe 1

The following query command returns 1.

:CALCulate:LLINe:TEST:STATe?

:CALCulate:FSCan:LLINe:ALL:DELeTe

Syntax

:CALCulate:LLINe:ALL:DELeTe

Description

Deletes all the limit line data.

:CALCulate:FSCan:LLINe<n>:DISPlay

Syntax

:CALCulate:FSCan:LLINe<n>:DISPlay <bool>

:CALCulate:FSCan:LLINe<n>:DISPlay?

Description

Turns on or off the selected limit line.

Queries the setting state of the selected limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	1
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command turns on Limit Line 2.

:CALCulate:FSCan:LLINe2:DISPlay ON or :CALCulate:FSCan:LLINe2:DISPlay 1

The following query returns 1.

:CALCulate:FSCan:LLINe2:DISPlay?

:CALCulate:FSCan:LLINe<n>:TRACe

Syntax

:CALCulate:FSCan:LLINe<n>:TRACe <enum>

:CALCulate:FSCan:LLINe<n>:TRACe?

Description

Sets the trace to be tested against the current limit line.

Queries the trace to be tested against the current limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<enum>	Discrete	1 2 3	Refer to "Remarks"

Description

Limit Line 1 and 2: The default is Trace 1.
 Limit Line 3 and 4: The default is Trace 2.
 Limit Line 5 and 6: The default is Trace 3.

Return Format

The query returns 1, 2, or 3.

Example

The following command sets that Trace 2 is tested against Limit Line 3.
 :CALCulate:FSCan:LLINE3:TRACe 2

The following query returns 2.
 :CALCulate:FSCan:LLINE3:TRACe?

:CALCulate:FSCan:LLINE<n>:DELeTe**Syntax**

:CALCulate:FSCan:LLINE<n>:DELeTe

Description

Deletes the selected limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—

Example

The following command deletes Limit Line 2.
 :CALCulate:FSCan:LLINE2:DELeTe

:CALCulate:FSCan:LLINE<n>:DESCRiption**Syntax**

:CALCulate:FSCan:LLINE<n>:DESCRiption <string>
 :CALCulate:FSCan:LLINE<n>:DESCRiption?

Description

Sets the descriptions of the specified limit line.
 Queries the descriptions of the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the limit line descriptions in strings.

Example

The following command sets the descriptions for Limit Line 2 to be LLINE2.
 :CALCulate:FSCan:LLINE2:DESCRiption LLINE2

The following query returns LLINe2.
:CALCulate:FSCan:LLINe2:DESCRiption?

:CALCulate:FSCan:LLINe<n>:COMMeNt

Syntax

:CALCulate:FSCan:LLINe<n>:COMMeNt <string>
:CALCulate:FSCan:LLINe<n>:COMMeNt?

Description

Sets the comments for the specified limit line.
Queries the comments for the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the limit line comments in strings.

Example

The following command sets the comments for Limit Line 2 to be LLINe2COMMeNt.
:CALCulate:FSCan:LLINe2:COMMeNt LLINe2COMMeNt

The following query returns LLINe2COMMeNt.
:CALCulate:FSCan:LLINe2:COMMeNt?

:CALCulate:FSCan:LLINe<n>:MARGIn

Syntax

:CALCulate:FSCan:LLINe<n>:MARGIn <rel_ampl>
:CALCulate:FSCan:LLINe<n>:MARGIn?

Description

Sets the margin for the selected limit line.
Queries the margin for the selected limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<rel_ampl>	Real	-40 dB to 0 dB	0 dB

Return Format

The query returns the margin for the limit line in scientific notation.

Example

The following command sets the margin for Limit Line 2 to be 1 dB.
:CALCulate:FSCan:LLINe2:MARGIn 1

The following query returns 1.000000000e+00.
:CALCulate:FSCan:LLINe2:MARGIn?

:CALCulate:FSCan:LLINe<n>:MARGin:STATe

Syntax

:CALCulate:FSCan:LLINe<n>:MARGin:STATe <bool>
:CALCulate:FSCan:LLINe<n>:MARGin:STATe?

Description

Enables or disables the margin for the selected limit line.
Queries the setting state of the margin for the selected limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command turns on the margin for Limit Line 2.

:CALCulate:FSCan:LLINe2:MARGin:STATe ON or :CALCulate:FSCan:LLINe2:MARGin:STATe 1

The following query returns 1.

:CALCulate:FSCan:LLINe2:MARGin:STATe?

:CALCulate:FSCan:LLINe<n>:OFFSet:X

Syntax

:CALCulate:FSCan:LLINe<n>:OFFSet:X <freq>
:CALCulate:FSCan:LLINe<n>:OFFSet:X?

Description

Sets the frequency offset of the specified limit line.
Queries the frequency offset of the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<freq>	Real	-1 GHz to 1 GHz	0 Hz

Return Format

The query returns the offset in scientific notation.

Example

The following command sets the frequency offset of Limit Line 2 to 5 kHz.

:CALCulate:FSCan:LLINe2:OFFSet:X 5000

The following query returns 5.000000000e+03.

:CALCulate:FSCan:LLINe2:OFFSet:X?

:CALCulate:FSCan:LLINe<n>:OFFSet:Y

Syntax

```
:CALCulate:FSCan:LLINe<n>:OFFSet:Y <re_ampl>
:CALCulate:FSCan:LLINe<n>:OFFSet:Y?
```

Description

Sets the amplitude offset of the specified limit line.
 Queries the amplitude offset of the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<re_ampl>	Real	-10 ¹⁵ dBm to 10 ¹⁵ dBm	0 dB

Return Format

The query returns the amplitude offset in scientific notation.

Example

The following command sets the amplitude offset for Limit Line 2 to be 20 dB.
 :CALCulate:FSCan:LLINe2:OFFSet:Y 20

The following query returns 2.000000000e+01.
 :CALCulate:FSCan:LLINe2:OFFSet:Y?

:CALCulate:FSCan:LLINe<n>:OFFSet:UPDate**Syntax**

```
:CALCulate:FSCan:LLINe<n>:OFFSet:UPDate
```

Description

Applies the offset to the specified limit line.

Example

The following command applies the offset to Limit Line 2.
 :CALCulate:FSCan:LLINe2:OFFSet:UPDate

:CALCulate:FSCan:LLINe<n>:CONTRol:INTerpolate:TYPE**Syntax**

```
:CALCulate:FSCan:LLINe<n>:CONTRol:INTerpolate:TYPE <type>
:CALCulate:FSCan:LLINe<n>:CONTRol:INTerpolate:TYPE?
```

Description

Sets the frequency interpolation mode of the selected limit line.
 Queries the frequency interpolation mode of the selected limit line.

Parameter

Name	Type	Range	Default
<type>	Discrete	LOGarithmic LINear	LINear

Return Format

The query returns LOG or LIN.

Example

The following command sets the frequency interpolation mode to LINear.
 :CALCulate:FSCan:LLINe1:CONTRol:INTerpolate:TYPE LINear

The following query returns LIN.
 :CALCulate:FSCan:LLINe1:CONTRol:INTerpolate:TYPE?

:CALCulate:FSCan:LLINe<n>:FREQUENCY:CMODE:RELative

Syntax

:CALCulate:FSCan:LLINe<n>:FREQUENCY:CMODE:RELative <bool>
 :CALCulate:FSCan:LLINe<n>:FREQUENCY:CMODE:RELative?

Description

Enables or disables the coupling between the selected limit line data points and the Midspan Freq.
 Queries the coupling status between the selected limit line data points and the Midspan Freq.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<bool>	Bool	OFF ON 0 1	ON 1

Remarks

OFF|0: disables the coupling function. That is, "Fixed" is selected under **X to CF**, and the frequency of the current limit line editing point is not affected by the Midspan Freq.

ON|1: enables the coupling function. That is, "Relative" is selected under **X to CF**, and the frequency of the current limit line editing point is the difference between the point and the current Midspan Freq. At this time, if Midspan Freq changes, then the position of the current editing point will move left and right with it.

Return Format

The query returns 0 or 1.

Example

The following command disables the coupling between data points of Limit Line 2 and the Midspan Freq.
 :CALCulate:FSCan:LLINe2:FREQUENCY:CMODE:RELative OFF
 or :CALCulate:FSCan:LLINe2:FREQUENCY:CMODE:RELative 0

The following query returns 0.
 :CALCulate:FSCan:LLINe2:FREQUENCY:CMODE:RELative?

:CALCulate:FSCan:LLINe<n>:AMPLitude:CMODE:RELative

Syntax

:CALCulate:FSCan:LLINe<n>:AMPLitude:CMODE:RELative <bool>
 :CALCulate:FSCan:LLINe<n>:AMPLitude:CMODE:RELative?

Description

Enables or disables the coupling functions between the selected limit line data points and the reference level.

Queries the setting state of the coupling functions between the selected limit line data points and the reference level.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<bool>	Bool	OFF ON 0 1	OFF 0

Remarks

OFF|0: disables the coupling function. That is, "Fixed" is selected under **Y to Ref**, and the amplitude of the current limit line editing point is not affected by the reference level.

ON|1: enables the coupling function. That is, "Relative" is selected under **Y to Ref**, and the amplitude of the current editing point is the difference between the amplitude of the point and that of the current reference level. At this time, if the reference level changes, then the position of the current editing point changes along with the reference level.

Return Format

The query returns 0 or 1.

Example

The following command disables the coupling functions between the selected limit line data points and the reference level.

```
:CALCulate:FSCan:LLINe2:AMPLitude:CMODE:RELative
```

OFF

```
or :CALCulate:FSCan:LLINe2:AMPLitude:CMODE:RELative 0
```

The following query returns 0.

```
:CALCulate:FSCan:LLINe2:AMPLitude:CMODE:RELative?
```

:CALCulate:FSCan:LLINe<n>:AMPLitude:INTerpolate:TYPE**Syntax**

```
:CALCulate:FSCan:LLINe<n>:AMPLitude:INTerpolate:TYPE <type>
```

```
:CALCulate:FSCan:LLINe<n>:AMPLitude:INTerpolate:TYPE?
```

Description

Sets the amplitude interpolation type of the specified limit line.

Queries the amplitude interpolation type of the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<type>	Discrete	LINear LOGarithmic	LINear

Remarks

LINear: Linear type. LOGarithmic: Log type.

Return Format

The query returns LIN or LOG.

Example

The following command sets the amplitude interpolation type of the Limit Line 2 to LOGarithmic.

```
:CALCulate:FSCan:LLINe2:AMPLitude:INTerpolate:TYPE LOGarithmic
```

The following query returns LOG.

```
:CALCulate:FSCan:LLINe2:AMPLitude:CMODE:RELative?
```

:CALCulate:FSCan:LLINe<n>:BUILd**Syntax**

```
:CALCulate:FSCan:LLINe<n>:BUILd <enum>
```

Description

Builds the limit line from the selected trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<enum>	Discrete	TRACE1 TRACE2 TRACE3	—

Example

The following command builds Limit Line 2 from Trace2.

```
:CALCulate:FSCan:LLINe2:BUILD TRACE2
```

:CALCulate:FSCan:LLINe<n>:COPY

Syntax

```
:CALCulate:FSCan:LLINe<n>:COPY <enum>
```

Description

Copies the selected limit line to the current limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	—
<enum>	Discrete	LLINE1 LLINE2 LLINE3 LLINE4 LLINE5 LLINE6	—

Remarks

If the limit line to be copied that you select is the same as the current limit line, no operation should be performed.

Example

The following command copies Limit Line 1 to Limit Line 2.

```
:CALCulate:FSCan:LLINe2:COPY LLINE1
```

:CALCulate:FSCan:LLINe<n>:DATA

Syntax

```
:CALCulate:FSCan:LLINe<n>:DATA <x>,<ampl>,<connect>{,<x>,<ampl>,<connect>}
```

```
:CALCulate:FSCan:LLINe<n>:DATA?
```

Description

Edits one limit line, and marks it with n.

Queries the limit line data that you are editing currently.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	1
<x>	Real	—	0
<ampl>	Real	—	--
<connect>	Discrete	0 1	0

Remarks

<x>: indicates frequency.

<apml>: indicates the amplitude. By default, its unit is dB μ V. The same X value can be configured with at most two amplitude values.

When <connect> is configured with 1, it indicates that the current point connects with the previous point to determine the limit line; when configured with 0, it indicates that the current point is disconnected from the previous point.

Return Format

Queries the returned limit line data that you are editing currently.

Example

The following command edits a limit line that contains three points, and marks it Limit Line 2.

```
:CALCulate:FSCan:LLINe2:DATA 50,100,1,100,150,1,200,200,1
```

The following query returns

```
5.000000000e+01,1.000000000e+02,1,1.000000000e+02,1.500000000e+02,1,2.000000000e+02,2.000000000e+02,1,.
```

```
:CALCulate:FSCan:LLINe2:DATA?
```

:CALCulate:FSCan:SLIST:SET:METER

Syntax

```
:CALCulate:FSCan:SLIST:SET:METER <integer>
```

Description

Sets the frequency of the meter as the frequency of the specified signal.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

The following command sets the frequency of the meter as the frequency of the 20th signal.

```
:CALCulate:FSCan:SLIST:SET:METER 20
```

:CALCulate:FSCan:SLIST:REPLace:METER

Syntax

```
:CALCulate:FSCan:SLIST:REPLace:METER <integer>
```

Description

Replaces the frequency of the currently selected signal with the currently set frequency of the meter and marks the signal.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

Replaces the frequency of the currently selected signal with the currently set frequency of the meter and marks the signal.

```
:CALCulate:FSCan:SLIST:REPLace:METER 20
```

:CALCulate:FSCan:SLIST:APPend:METer

Syntax

:CALCulate:FSCan:SLIST:APPend:METer

Description

Adds the currently set meter frequency to the signal list.

:CALCulate:FSCan:SLIST:APPend:METer:MAX

Syntax

:CALCulate:FSCan:SLIST:APPend:METer:MAX

Description

Adds the signal from the meter to the signal list (max. value).

:CALCulate:FSCan:SLIST:MARK:SIGNal

Syntax

:CALCulate:FSCan:SLIST:MARK:SIGNal <integer>

Description

Marks the specified signal.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

The following command marks the 20th signal in the signal list.

:CALCulate:FSCan:SLIST:MARK:SIGNal 20

:CALCulate:FSCan:SLIST:MARK:CLEar:SIGNal

Syntax

:CALCulate:FSCan:SLIST:MARK:CLEar:SIGNal <integer>

Description

Unmarks the specified signal.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

The following command unmarks the 20th signal in the signal list.

:CALCulate:FSCan:SLIST:MARK:CLEar:SIGNal 20

:CALCulate:FSCan:SLIST:MARK:CLEar:ALL

Syntax

:CALCulate:FSCan:SLIST:MARK:CLEar:ALL

Description

Unmarks all the signals in the signal list.

:CALCulate:FSCan:SLIST:MARK:DUPLicates:ALL

Syntax

:CALCulate:FSCan:SLIST:MARK:DUPLicates:ALL

Description

Marks all the duplicated signals in the signal list.

:CALCulate:FSCan:SLIST:MARK:DUPLicates:UPPer

Syntax

:CALCulate:FSCan:SLIST:MARK:DUPLicates:UPPer

Description

Marks the duplicated signals upward from the current signal.

:CALCulate:FSCan:SLIST:MARK:DUPLicates:LOWer

Syntax

:CALCulate:FSCan:SLIST:MARK:DUPLicates:LOWer

Description

Marks the duplicated signals downward from the current signal.

:CALCulate:FSCan:SLIST:MARK:ALL

Syntax

:CALCulate:FSCan:SLIST:MARK:ALL

Description

Marks all the signals in the signal list.

:CALCulate:FSCan:SLIST:SElect:SIGNal

Syntax

:CALCulate:FSCan:SLIST:SElect:SIGNal <integer>
:CALCulate:FSCan:SLIST:SElect:SIGNal?

Description

Selects the specified signal as the current signal.
Queries the currently selected signal.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

The following command selects the 20th signal in the signal list as the current signal.

```
:CALCulate:FSCan:SLIST:SElect:SIGNAL 20
```

:CALCulate:FSCan:SLIST:SORT:TYPE**Syntax**

```
:CALCulate:FSCan:SLIST:SORT:TYPE <enum>
```

```
:CALCulate:FSCan:SLIST:SORT:TYPE?
```

Description

Sets the signal sorting mode.

Queries the signal sorting mode.

Parameter

Name	Type	Range	Default
<enum>	Discrete	FREQuency DAMPlitude DLDElta TIME	FREQuency

Remarks

FREQuency: sorted by frequency.

DAMPlitude: sorted by detector amplitude.

DLDElta: sorted by delta detector amplitude. TIME: sorted by timestamp.

Return Format

The query returns FREQ, DAMP, or DLD.

Example

The following command sets the signal sorting mode to FREQuency.

```
:CALCulate:FSCan:SLIST:SORT:TYPE FREQuency
```

The following query returns FREQ.

```
:CALCulate:FSCan:SLIST:SORT:TYPE?
```

:CALCulate:FSCan:SLIST:SORT:ORDER**Syntax**

```
:CALCulate:FSCan:SLIST:SORT:ORDER <enum>
```

```
:CALCulate:FSCan:SLIST:SORT:ORDER?
```

Description

Sets the signal sorting order.

Queries the signal sorting order.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ASCending DESCending	ASCending

Return Format

The query returns ASC or DESC.

Example

The following command sets the signal to be sorted in ascending order.

```
:CALCulate:FSCan:SLIST:SORT:ORDER ASCending
```

The following query returns ASC.

:CALCulate:FSCan:SLIST:SORT:ORDER?

:CALCulate:FSCan:SLIST:SORT:AUTO

Syntax

:CALCulate:FSCan:SLIST:SORT:AUTO <bool>

:CALCulate:FSCan:SLIST:SORT:AUTO?

Description

Enables or disables the auto sort function.

Queries the on/off status of auto sort function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command disables the auto sort function.

:CALCulate:FSCan:SLIST:SORT:AUTO OFF or :CALCulate:FSCan:SLIST:SORT:AUTO 0

The following query returns 0.

:CALCulate:FSCan:SLIST:SORT:AUTO?

:CALCulate:FSCan:SLIST:SORT:DAMPlitude

Syntax

:CALCulate:FSCan:SLIST:SORT:DAMPlitude <enum>

:CALCulate:FSCan:SLIST:SORT:DAMPlitude?

Description

Sets the detector amplitude sorting mode.

Queries the detector amplitude sorting mode.

Parameter

Name	Type	Range	Default
<enum>	Discrete	DET1 DET2 DET3	—

Return Format

The query returns DET1, DET2, or DET3.

Example

The following command sets the detector amplitude sorting mode of the signal to Det1.

:CALCulate:FSCan:SLIST:SORT:DAMPlitude DET1

The following query returns DET1.

:CALCulate:FSCan:SLIST:SORT:DAMPlitude?

:CALCulate:FSCan:SLIST:SORT:DLDelta

Syntax

:CALCulate:FSCan:SLIST:SORT:DLDelta <enum>
:CALCulate:FSCan:SLIST:SORT:DLDelta?

Description

Sets the delta detector amplitude sorting mode of the signal.
Queries the delta detector amplitude sorting mode of the signal.

Parameter

Name	Type	Range	Default
<enum>	Discrete	DET1 DET2 DET3	—

Return Format

The query returns DET1, DET2, or DET3.

Example

The following command sets the delta detector amplitude sorting mode of the signal to Det1.
:CALCulate:FSCan:SLIST:SORT:DLDelta DET1

The following query returns DET1.
:CALCulate:FSCan:SLIST:SORT:DLDelta?

:CALCulate:FSCan:SLIST:DELeTe:SIGNal

Syntax

:CALCulate:FSCan:SLIST:DELeTe:SIGNal <integer>

Description

Deletes the selected signals from the signal list.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

The following command deletes the 20th signal from the signal list.
:CALCulate:FSCan:SLIST:DELeTe:SIGNal 20

:CALCulate:FSCan:SLIST:DELeTe:ALL

Syntax

:CALCulate:FSCan:SLIST:DELeTe:ALL

Description

Deletes all the signals from the signal list.

:CALCulate:FSCan:SLIST:DELeTe:MARKed

Syntax

:CALCulate:FSCan:SLIST:DELeTe:MARKed

Description

Deletes all the marked signals from the signal list.

:CALCulate:FSCan:SLIST:DELeTE:UNMarked**Syntax**

:CALCulate:FSCan:SLIST:DELeTE:UNMarked

Description

Deletes all the unmarked signals from the signal list.

:CALCulate:FSCan:SLIST:ZOOM**Syntax**

:CALCulate:FSCan:SLIST:ZOOM <integer>

Description

Takes midspan frequency as the reference to zoom the coordinate display of the currently selected signal in the signal list to 10% of the current span.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 2,000	—

Example

Takes midspan frequency as the reference to zoom the coordinate display of the 3rd signal to 10% of the current span.

:CALCulate:FSCan:SLIST:ZOOM 3

:CALCulate:FSCan:SLIST:ZOOM:OUT**Syntax**

:CALCulate:FSCan:SLIST:ZOOM:OUT

Description

Returns the coordinate display of the currently selected signal to its previous display setting prior to the Signal Zoom.

:CALCulate:FSCan:SEARch:MODE**Syntax**

:CALCulate:FSCan:SEARch:MODE <type>

:CALCulate:FSCan:SEARch:MODE?

Description

Sets the search criteria.

Queries the search criteria.

Parameter

Name	Type	Range	Default
<type>	Discrete	PONLy PLIMits SLIMits	PONLy

Remarks

PONLy: searches those meet peak criteria.

PLIMits: searches those meet both the peak criteria and limit condition.

SLIMits: searches those meet both the subrange and limit condition.

Return Format

The query returns PONL, PLIM, or SLIM.

Example

The following command sets the search criteria to PLIMits.

```
:CALCulate:FSCan:SEARch:MODE PLIMits
```

The following query returns PLIM.

```
:CALCulate:FSCan:SEARch:MODE?
```

:CALCulate:FSCan:SEARch:PEAK:COUNt**Syntax**

```
:CALCulate:FSCan:SEARch:PEAK:COUNt <integer>
```

```
:CALCulate:FSCan:SEARch:PEAK:COUNt?
```

Description

Sets the number of peaks to be searched.

Queries the number of peaks to be searched.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 500	25

Return Format

The query returns 0 or 1.

Example

The following command sets the number of peaks to be searched to 5.

```
:CALCulate:FSCan:SEARch:PEAK:COUNt 5
```

The following query returns 5.

```
:CALCulate:FSCan:SEARch:PEAK:COUNt?
```

:CALCulate:FSCan:SEARch:PEAK:COUNt:STATe**Syntax**

```
:CALCulate:FSCan:SEARch:PEAK:COUNt:STATe <bool>
```

```
:CALCulate:FSCan SEARch:PEAK:COUNt:STATe?
```

Description

Enables or disables the peak number state.

Queries the on/off status of the peak number.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak number state.

:CALCulate:FSCan:SEARch:PEAK:COUNT:STATe ON or

:CALCulate:FSCan:SEARch:PEAK:COUNT:STATe 1

The following query returns 1.

:CALCulate:FSCan:SEARch:PEAK:COUNT:STATe?

:CALCulate:FSCan:SEARch:SUBRange:COUNT**Syntax**

:CALCulate:FSCan:SEARch:SUBRange:COUNT <integer>

:CALCulate:FSCan:SEARch:SUBRange:COUNT?

Description

Sets the number of subranges for the signal search.

Queries the number of subranges for the signal search.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 500	25

Return Format

The query returns 0 or 1.

Example

Sets the number of subranges for the signal search to 5.

:CALCulate:FSCan:SEARch:SUBRange:COUNT 5

The following query returns 5.

:CALCulate:FSCan:SEARch:SUBRange:COUNT?

:CALCulate:FSCan:MARKer<n>:MODE**Syntax**

:CALCulate:FSCan:MARKer<n>:MODE <enum>

:CALCulate:FSCan:MARKer<n>:MODE?

Description

Sets the type of the specified marker.

Queries the type of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—
<enum>	Discrete	POSition DELTA FIX OFF	POSition

Remarks

POSition: Position marker; DELTA: Delta marker; FIX: Fixed marker; OFF: disable the marker.

Return Format

The query returns POS, DELT, FIX, or OFF.

Example

The following command sets the type of Marker 1 to Position.

:CALCulate:FSCan:MARKer1:MODE POSition

The following query returns POS.

:CALCulate:FSCan:MARKer1:MODE?

:CALCulate:FSCan:MARKer<n>:X

Syntax

:CALCulate:FSCan:MARKer<n>:X <param>

:CALCulate:FSCan:MARKer<n>:X?

Description

Sets the marker frequency of the specified marker.

Queries the marker frequency of the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—
<param>	Real	0 Hz to (1.00E + 13 Hz)	515 MHz

Return Format

The query returns the frequency of the specified marker in scientific notation.

Example

The following command sets the frequency of Marker 1 to 515 MHz.

:CALCulate:FSCan:MARKer1:X 515000000

The following query returns 5.150000000e+08.

:CALCulate:FSCan:MARKer1:X?

:CALCulate:FSCan:MARKer<n>:X:POSition

Syntax

:CALCulate:FSCan:MARKer<n>:X:POSition <index>

:CALCulate:FSCan:MARKer<n>:X:POSition?

Description

Sets the X-axis position of the trace at the specified marker.

Queries the X-axis position of the trace at the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<index>	Integer	—	0

Return Format

The query returns the X-axis position of the trace at the specified marker in integer.

Example

The following command sets the X-axis position of the trace at Marker 1 to 100.

:CALCulate:FSCan:MARKer1:X:POSition 100

The following query returns 100.

:CALCulate:FSCan:MARKer1:X:POSition?

:CALCulate:FSCan:MARKer<n>:Y

Syntax

:CALCulate:FSCan:MARKer<n>:Y <amp;>

:CALCulate:FSCan:MARKer<n>:Y?

Description

Sets the Y-axis value of the specified marker.

Queries the Y-axis value of the specified marker. Its default unit is dB μ V.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	1
<amp;>	Real	—	—

Remarks

This setting command is only available when there is only one marker and its marker mode is Fixed.

If the marker mode of the specified marker is Delta, the query command queries the Y-axis difference between the reference marker and the Delta marker.

Return Format

The query returns the Y-axis value in scientific notation.

Example

The following command sets Y-axis value at Fixed Marker 1 to -59.6 dBm.

:CALCulate:FSCan:MARKer1:Y -59.6

The following query returns -5.960000000e+01.

:CALCulate:FSCan:MARKer1:Y?

:CALCulate:FSCan:MARKer<n>:MAXimum

Syntax

:CALCulate:FSCan:MARKer<n>:MAXimum

Description

Performs one peak search **based** on the search mode set by the

:CALCulate:FSCan:MARKer:PEAK:SEARch:MODE command and marks it with the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one peak search, and marks with Marker 2.

:CALCulate:FSCan:MARKer2:MAXimum

:CALCulate:FSCan:MARKer<n>:MAXimum:NEXT

Syntax

:CALCulate:FSCan:MARKer<n>:MAXimum:NEXT

Description

Searches for and marks the peak whose amplitude on the trace is next to that of the current peak and which meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one next peak search, and marks with Marker 2.

:CALCulate:FSCan:MARKer2:MAXimum:NEXT

:CALCulate:FSCan:MARKer<n>:MAXimum:RIGHT

Syntax

:CALCulate:FSCan:MARKer<n>:MAXimum:RIGHT

Description

Searches for and marks the nearest peak which is located at the right side of the current peak and meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one right peak search, and marks with Marker 2.

:CALCulate:FSCan:MARKer2:MAXimum:RIGHT

:CALCulate:FSCan:MARKer<n>:MAXimum:LEFT

Syntax

:CALCulate:FSCan:MARKer<n>:MAXimum:LEFT

Description

Searches for and marks the nearest peak which is located at the left side of the current peak and meets the peak search condition.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one left peak search, and marks with Marker 2.

```
:CALCulate:FSCan:MARKer2:MAXimum:LEFT
```

:CALCulate:FSCan:MARKer<n>:MINimum**Syntax**

```
:CALCulate:FSCan:MARKer<n>:MINimum
```

Description

Searches for and marks the peak with the minimum amplitude on the trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Remarks

When no peak is found, a prompt message "No peak found" is displayed on the screen.

Example

The following command performs one minimum search, and marks it with Marker 2.

```
:CALCulate:FSCan:MARKer2:MINimum
```

:CALCulate:FSCan:MARKer<n>:REFerence**Syntax**

```
:CALCulate:FSCan:MARKer<n>:REFerence <integer>
```

```
:CALCulate:FSCan:MARKer<n>:REFerence?
```

Description

Sets the reference marker for the specified marker.

Queries the reference marker for the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—
<integer>	Integer	1 to 8	By default, the reference marker is the marker next to it.

Remarks

Each marker can have another marker to be its reference marker.

If the current marker is a Delta marker, the measurement result of the marker will be determined by the reference marker.

Any marker cannot have itself to be the reference marker.

Example

The following command sets the reference marker for Marker 1 to 2.

```
:CALCulate:FSCan:MARKer1:REFerence 2
```

The following query returns 2.

```
:CALCulate:FSCan:MARKer1:REFerence?
```

:CALCulate:FSCan:MARKer<n>:LINes:STATe

Syntax

:CALCulate:FSCan:MARKer<n>:LINes:STATe <bool>

:CALCulate:FSCan:MARKer<n>:LINes:STATe?

Description

Enables or disables the marker line state.

Queries the marker line state.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables marker line state.

:CALCulate:FSCan:MARKer:LINes:STATe ON or :CALCulate:FSCan:MARKer:LINes:STATe 1

The following query returns 1.

:CALCulate:FSCan:MARKer:LINes:STATe?

:CALCulate:FSCan:MARKer<n>:TRACe

Syntax

:CALCulate:FSCan:MARKer<n>:TRACe <integer>

:CALCulate:FSCan:MARKer<n>:TRACe?

Description

Sets the marker trace for the specified marker.

Queries the marker trace for the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—
<integer>	Discrete	1 2 3	1

Remarks

<integer> indicates the marker trace, and its range is from Trace 1 to Trace 3.

Return Format

The query returns an integer ranging from 1 to 3.

Example

The following command sets the marker trace of Marker 1 to Trace 2.

:CALCulate:FSCan:MARKer1:TRACe 2

The following query returns 2.

:CALCulate:FSCan:MARKer1:TRACe?

:CALCulate:FSCan:MARKer<n>:TRACe:AUTO

Syntax

:CALCulate:FSCan:MARKer<n>:TRACe:AUTO <bool>
:CALCulate:FSCan:MARKer<n>:TRACe:AUTO?

Description

Enables or disables the auto marker trace of the specified marker.
Queries the on/off status of auto marker trace.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the auto marker trace of Marker 1.

:CALCulate:FSCan:MARKer1:TRACe:AUTO ON or :CALCulate:FSCan:MARKer1:TRACe:AUTO 1

The following query returns 1.

:CALCulate:FSCan:MARKer1:TRACe:AUTO?

:CALCulate:FSCan:MARKer<n>:FUNCtion:MAMarker?

Syntax

:CALCulate:FSCan:MARKer<n>:FUNCtion:MAMarker?

Description

Queries the measurement result at the specified marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Return Format

The query returns the measurement results at the specified marker in scientific notation, including Det1 amplitude, Det2 amplitude, Det3 amplitude, and frequency value at the marker. The returned values are separated by commas. If the detector is disabled or the measurement is not completed, the query returns -1.700000000e+02.

Example

The following query returns the measurement result at Marker 1: -1.700000000e+02,-1.700000000e+02,-1.700000000e+02,5.150000000e+08.

:CALCulate:FSCan:MARKer1:FUNCtion:MAMarker?

:CALCulate:FSCan:MARKer<n>[:SET]:SLIST

Syntax

:CALCulate:FSCan:MARKer<n>[:SET]:SLIST

Description

Adds the frequency at the specified marker to the signal list.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Example

The following command adds the frequency at the Marker 1 (Position) to the signal list.

:CALCulate:FSCan:MARKer1:SET:SLISt

:CALCulate:FSCan:MARKer<n>[:SET]:METer**Syntax**

:CALCulate:FSCan:MARKer<n>[:SET]:METer

Description

Sets the frequency at the currently selected marker to the frequency of the meter.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Example

The following command sets the frequency at Marker 1 to the meter frequency.

:CALCulate:FSCan:MARKer1:SET:METer

:CALCulate:FSCan:MARKer<n>:TO:METer**Syntax**

:CALCulate:FSCan:MARKer<n>:TO:METer

Description

Sets the frequency of the meter to the frequency at the currently selected marker.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8	—

Example

The following command sets the frequency of the meter to the frequency at Marker 1.

:CALCulate:FSCan:MARKer1:TO:METer

:CALCulate:FSCan:MARKer[:SET]:SLISt**Syntax**

:CALCulate:FSCan:MARKer[:SET]:SLISt

Description

Adds the measurement of the specified marker to the signal list.

Example

The following command adds the marker measurement to the signal list.

:CALCulate:FSCan:MARKer:SET:SLISt

:CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe

Syntax

:CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe <bool>

:CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe?

Description

Enables or disables the peak excursion function.

Queries the on/off status of the peak excursion function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak excursion function.

:CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe

or :CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe 1

ON

The query returns 1.

:CALCulate:FSCan:MARKer:PEAK:EXCursion:STaTe?

:CALCulate:FSCan:MARKer:PEAK:EXCursion

Syntax

:CALCulate:FSCan:MARKer:PEAK:EXCursion <rel_amp>

:CALCulate:FSCan:MARKer:PEAK:EXCursion?

Description

Sets the excursion of the peak. Its unit is dB.

Queries the excursion of the peak.

Parameter

Name	Type	Range	Default
<rel_amp>	Real	0 dB to 100 dB	6 dB

Return Format

The query returns the peak excursion in scientific notation.

Example

The following command sets the peak excursion to 12 dB.

:CALCulate:FSCan:MARKer:PEAK:EXCursion 12

The following query returns 1.200000000e+01.

:CALCulate:FSCan:MARKer:PEAK:EXCursion?

:CALCulate:FSCan:MARKer:PEAK:THReshold:STaTe

Syntax

:CALCulate:FSCan:MARKer:PEAK:THReshold:STaTe <bool>

:CALCulate:FSCan:MARKer:PEAK:THReshold:STaTe?

Description

Enables or disables the peak threshold function.
Queries the status of the peak threshold function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the peak threshold function.

:CALCulate:FSCan:MARKer:PEAK:THReshold:STATe

or :CALCulate:FSCan:MARKer:PEAK:THReshold:STATe 1

ON

The following query returns 1.

:CALCulate:FSCan:MARKer:PEAK:THReshold:STATe?

:CALCulate:FSCan:MARKer:PEAK:THReshold

Syntax

:CALCulate:FSCan:MARKer:PEAK:THReshold <ampl>

:CALCulate:FSCan:MARKer:PEAK:THReshold?

Description

Sets the peak threshold.

Queries the peak threshold.

Parameter

Name	Type	Range	Default
<ampl>	Real	-93.01 dBμV to +106.99 dBμV	16.99 dBμV

Return Format

The query returns the peak threshold of marker in scientific notation. The unit is dBμV.

Example

The following command sets the peak threshold to -100 dB.

:CALCulate:FSCan:MARKer:PEAK:THReshold -100

The following query returns -1.000000000e+02.

:CALCulate:FSCan:MARKer:PEAK:THReshold?

:CALCulate:FSCan:MARKer:PEAK:SEARch:MODE

Syntax

:CALCulate:FSCan:MARKer:PEAK:SEARch:MODE <enum>

:CALCulate:FSCan:MARKer:PEAK:SEARch:MODE?

Description

Sets the peak search mode.

Queries the peak search mode.

Parameter

Name	Type	Range	Default
<enum>	Discrete	PARameter MAXimum	MAXimum

Remarks

PARAmeter: indicates parameter. If "parameter" is selected under search mode, the system will search for the peak of the specified parameter on the trace.

MAXimum: indicates maximum. If Max is selected under Search Mode, the system will search for the maximum value on the trace.

The command is only valid for the peak search executed by sending the `:CALCulate:MARKer<n>:MAXimum` command. Other items under the peak search menu such as Next Peak, Next Peak Right, Next Peak Left, and Minimum Search are all searched based on "Parameter".

Return Format

The query returns PAR or MAX.

Example

The following command sets the peak search mode to be "Parameter".

```
:CALCulate:FSCan:MARKer:PEAK:SEARCh:MODE PARAmeter
```

The following query returns PAR.

```
:CALCulate:FSCan:MARKer:PEAK:SEARCh:MODE?
```

:CALCulate:EMI:SLIST:MARK**Syntax**

```
:CALCulate:EMI:SLIST:MARK <enum>
```

Description

Marks the specified types of signals in the signal list.

Parameter

Name	Type	Range	Default
<enum>	Discrete	CURRENT DUPLICATE ALL	CURRENT

Remarks

ALL: Marks all the signals in the signal list.

CURRENT: Marks the signals except the currently selected signal from the signal list.

DUPLICATE: Marks the duplicated signals in the signal list.

Example

The following command marks all the signals in the signal list.

```
:CALCulate:EMI:SLIST:MARK ALL
```

:CALCulate:EMI:SLIST:CLEAR**Syntax**

```
:CALCulate:EMI:SLIST:CLEAR <enum>
```

Description

Clears the mark for the specified type of signals in the signal list.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ALL CURRENT	CURRENT

Remarks

ALL: Unmarks all the signals in the signal list.

CURRent: Unmarks the currently selected signal in the signal list.

Example

The following command clears the marks for all the signals in the signal list.

:CALCulate:EMI:SLIST:CLEar ALL

:CALCulate:EMI:SLIST:DElete**Syntax**

:CALCulate:EMI:SLIST:DElete <enum>

Description

Sets the types of signals to be deleted.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ALL CURRent MARKed UNMarked	CURRent

Remarks

ALL: Deletes all the signals from the signal list.

CURRent: deletes the currently selected signals from the signal list.

MARKed: deletes all the marked signals from the signal list.

UNMarked: deletes all the unmarked signals from the signal list.

Example

The following command deletes all the signals from the signal list.

:CALCulate:EMI:SLIST:DElete ALL

:CALCulate:METER:LIMit:ALL:FAIL?**Syntax**

:CALCulate:METER:LIMit:ALL:FAIL?

Description

Queries the measurement results of all the selected limit line and its associated meter.

Remarks

If no limit line is set for the meter, then the query returns 0.

It is only applicable to the meter with the limit line being enabled. If one limit line is disabled, then it will not be measured.

Return Format

The query returns 0 or 1. 0 indicates that all the meters are within the limit line range, and the test passes.

1 indicates the test fails.

:CALCulate:METER<n>:LIMit[:DATA]**Syntax**

:CALCulate:METER<n>:LIMit[:DATA] <ampl>

:CALCulate:METER<n>:LIMit[:DATA]?

Description

Sets the limit value of the specified meter.
 Queries the limit value of the specified meter.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<ampl>	Real	-250 dBμV to 250 dBμV	80 dBμV

Return Format

The query returns the limit value of the specified meter in scientific notation. The default unit is dBμV.

Example

The following command sets the limit value of Meter1 to 10 dBμV.

```
:CALCulate:METER1:LIMit:DATA 10
```

The following query returns 1.000000000e+01.

```
:CALCulate:METER1:LIMit:DATA?
```

:CALCulate:METER<n>:LIMit:STATe**Syntax**

```
:CALCulate:METER<n>:LIMit:STATe <bool>
```

```
:CALCulate:METER<n>:LIMit:STATe?
```

Description

Enables or disables the limit state of the specified meter.
 Queries the on/off limit state of the specified meter.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables the limit state of Meter1.

```
:CALCulate:METER1:LIMit:STATe ON or :CALCulate:METER1:LIMit:STATe 1
```

The following query returns 1.

```
:CALCulate:METER1:LIMit:STATe?
```

:CALCulate:METER<n>:LIMit:ULLine <type>**Syntax**

```
:CALCulate:METER<n>:LIMit:ULLine <type>
```

```
:CALCulate:METER<n>:LIMit:ULLine?
```

Description

Sets the limit line for the specified meter.
 Queries the limit line for the specified meter.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<type>	Discrete	OFF LIMit1 LIMit2 LIMit3 LIMit4 LIMit5 LIMit6	OFF

Return Format

The query returns OFF, LIM1, LIM2, LIM3, LIM4, LIM5, or LIM6.

Example

The following command sets the limit line for Meter1 to Limit1.

```
:CALCulate:METER1:LIMit:ULLine LIMit1
```

The following query returns LIMit1.

```
:CALCulate:METER1:LIMit:ULLine?
```

:CALCulate:METER<n>:LIMit:FAIL?**Syntax**

```
:CALCulate:METER<n>:LIMit:FAIL?
```

Description

Queries the measurement results of the limit line and its associated specified meter.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—

Remarks

This command is valid no matter whether the meter or limit line is enabled.

Return Format

The query returns 0 or 1. 0 indicates that the selected meter is within the limit line range, and the test passes. 1 indicates that the selected meter exceeds the limit line range, and the test fails.

Example

The following query returns 1, indicating that Meter1 exceeds the limit line range, and the test fails.

```
:CALCulate:METER1:LIMit:FAIL?
```

:CALCulate:METER:LIMit:ALL:FAIL?**Syntax**

```
:CALCulate:METER:LIMit:ALL:FAIL?
```

Description

Queries the measurement results of the limit line of all the meters.

:CALCulate:LIMit<n>:FAIL?**Syntax**

```
:CALCulate:LIMit<n>:FAIL?
```

Description

Queries the test result of the specified limit line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6	1

:CALCulate:TRACe<n>:FAIL?**Syntax**

:CALCulate:TRACe<n>:FAIL?

Description

Queries the test result of the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1

:CONFigure Commands

:CONFigure?

Syntax

:CONFigure?

Description

Queries the current measurement function.

Return Format

The query returns EMI.

:CONFigure:CATalog?

Syntax

:CONFigure:CATalog?

Description

Queries the currently supported measurement application.

:COUPle Commands

:COUPle

Syntax

:COUPle <enum>

Description

Performs auto coupling.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ALL NONE	-

Remarks

ALL: enables auto coupling.

NONE: disables auto coupling. Couple manually.

Example

The following command disables auto coupling function.

:COUPle NONE

:DISPlay Commands

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel

Syntax

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel <ampl>

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel?

Description

Sets the reference level.

Queries the reference level.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<ampl>	Real	-63.01 dB μ V to 126.99 dB μ V	106.99 dB μ V

Return Format

The query returns the reference level value in scientific notation. The default unit is dB μ V.

Example

The following command sets the reference level to -10 dB.

:DISPlay:WINDow1:TRACe:Y:SCALe:RLEVel -10

The following query returns -1.000000e+01.

:DISPlay:WINDow1:TRACe:Y:SCALe:RLEVel?

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel:OFFSet

Syntax

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel:OFFSet <rel_ampl>

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:RLEVel:OFFSet?

Description

Sets the reference level offset.

Queries the reference level offset.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<rel_ampl>	Real	-300 dB to 300 dB	0 dB

Remarks

The offset of the reference level only modifies the reference level and amplitude readout of the marker, but does not change the position of the curve.

Return Format

The query returns the offset of the reference level in scientific notation.

Example

The following command sets the reference level offset to 10 dB.

:DISPlay:WINDow1:TRACe:Y:SCALe:RLEVel:OFFSet 10

The following query returns 1.000000e+01.

:DISPlay:WINDow1:TRACe:Y:SCALe:RLEVel:OFFSet?

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:PDIVision

Syntax

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:PDIVision <rel_ampl>

:DISPlay:WINDow<n>:TRACe:Y[:SCALe]:PDIVision?

Description

Sets the Y-axis scale value.

Queries the Y-axis scale value.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<rel_ampl>	Real	0.1 dB to 20 dB	10 dB

Return Format

The query returns the Y-axis scale value in scientific notation.

Example

The following command sets the Y-axis scale value to 15 dB.

:DISPlay:WINDow1:TRACe:Y:SCALe:PDIVision 15

The following query returns 1.500000e+01.

:DISPlay:WINDow1:TRACe:Y:SCALe:PDIVision?

:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum>

Syntax

:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum> <ampl>

:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum>?

Description

Sets the position of the display line. Its default unit is dB μ V.

Queries the position of the display line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<dlnum>	Discrete	1 2 3 4	1
<ampl>	Real	Current amplitude range	81.99 dB μ V

Remarks

By default, the display line is disabled. When the display line is enabled for the first time, its position is 81.99 dB μ V.

Return Format

The query returns the position of the display line in scientific notation.

Example

The following command sets the position of Display Line1 to -10 dB μ V.

:DISPlay:WINDow1:TRACe:Y:DLINe1 -10

The following command returns -1.000000e+01.

:DISPlay:WINDow1:TRACe:Y:DLINe1?

:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum>:STATe

Syntax

:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum>:STATe <bool>
:DISPlay:WINDow<n>:TRACe:Y:DLINe<dlnum>:STATe?

Description

Enables or disables the display line.
Queries the on/off status of the display line.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<dlnum>	Discrete	1 2 3 4	1
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables Display Line1.

:DISPlay:WINDow1:TRACe:Y:DLINe1:STATe ON or :DISPlay:WINDow1:TRACe:Y:DLINe1:STATe 1

The following query returns 1.

:DISPlay:WINDow1:TRACe:Y:DLINe1:STATe?

:DISPlay:WINDow<n>:TRACe:X[:SCALE]:SPACIng

Syntax

:DISPlay:WINDow<n>:TRACe:X[:SCALE]:SPACIng <enum>
:DISPlay:WINDow<n>:TRACe:X[:SCALE]:SPACIng?

Description

Sets the X-axis scale type.
Queries the X-axis scale type.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	--
<enum>	Discrete	LINear LOGarithmic	LOGarithmic

Remarks

LINear: Linear type. LOGarithmic: Log type.

Return Format

The query returns LIN or LOG.

Example

The following command sets the X-axis scale type to LOG.

:DISPlay:WINDow1:TRACe:X:SCALE:SPACIng LOGarithmic

The following query returns LOG.

:DISPlay:WINDow1:TRACe:X:SCALe:SPACing?

:DISPlay:VIEW[:SElect]

Syntax

:DISPlay:VIEW[:SElect] <view>
:DISPlay:VIEW[:SElect]?

Description

Sets the current display view.
Queries the current display view.

Parameter

Name	Type	Range	Default
<view>	Discrete	EMIFscan	EMIFscan

Remarks

In EMI mode, the only valid parameter is EMIFscan.

Return Format

The query returns EMIF.

Example

The following commands sets the current view to EMIFscan.
:DISPlay:VIEW:SElect EMIFscan

The following query returns EMIF.
:DISPlay:VIEW:SElect?

:DISPlay:METer<n>[:STATe]

Syntax

:DISPlay:METer<n>[:STATe] <bool>
:DISPlay:METer<n>[:STATe]?

Description

Enables or disables the specified meter.
Queries the on/off state of the specified meter.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	Refer to "Remarks"

Remarks

By default, Meter1 is enabled, and Meter2 and Meter3 are disabled.

Return Format

The query returns 0 or 1.

Example

The following command enables Meter2.
:DISPlay:METer2:STATe ON or :DISPlay:METer2:STATe 1

The following query returns 1.

:DISPlay:MEter2:STATe?

:DISPlay:MEter<n>:DETEctor <type>

Syntax

:DISPlay:MEter<n>:DETEctor <type>
:DISPlay:MEter<n>:DETEctor?

Description

Sets the detector type for the specified meter.
Queries the detector type for the specified meter.

Parameter

Name	Type	Range	Default
<type>	Discrete	POSitive QPEak EAVerage RAVerage AVERage NEGative	POSitive

Remarks

The detector types of the meter include Pos Peak, Quasi Peak, EMI Average, RMS Average, Average (voltage), and Neg Peak.

Return Format

The query returns POS, QPE, EAV, RAV, AVE, or NEG.

Example

The following command sets the detector type of Meter 2 to RAVerage.
:DISPlay:MEter2:DETEctor RAVerage

The following query returns RAV.
:DISPlay:MEter2:DETEctor?

:DISPlay:FSCan:WINDow:MAMarker[:STATe]

Syntax

:DISPlay:FSCan:WINDow:MAMarker[:STATe] <bool>
:DISPlay:FSCan:WINDow:MAMarker[:STATe]?

Description

Enables or disables the display of the marker measurement results in the measurement window.
Queries the on/off state of Meas at Marker Window.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the marker measurement results in the measurement window.
:DISPlay:FSCan:WINDow:MAMarker:STATe ON or :DISPlay:FSCan:WINDow:MAMarker:STATe 1

The following query returns 1.
:DISPlay:FSCan:WINDow:MAMarker:STATe?

:DISPlay:FSCan:VIEW:METER:FLINE

Syntax

:DISPlay:FSCan:VIEW:METER:FLINE <bool>
:DISPlay:FSCan:VIEW:METER:FLINE?

Description

Enables or disables the display of the meter frequency line.
Queries the on/off display state of the meter frequency line.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the meter frequency line.
:DISPlay:FSCan:VIEW:METER:FLINE ON

The following query returns 1.
:DISPlay:FSCan:VIEW:METER:FLINE?

IEEE 488.2 Common Commands

IEEE 488.2 common commands are used to operate or query the status registers.

*CLS

Syntax

*CLS

Description

Clears all the event registers and status byte registers.

*ESE

Syntax

*ESE <value>

*ESE?

Description

Sets the enable register for the standard event status register.

Queries the enable register for the standard event status register.

Parameter

Name	Type	Range	Default
<value>	Integer	Refer to "Remarks"	0

Remarks

The bit 2, bit 3, bit 4, and bit 7 are reserved; you can set their values but they will not affect the system. Bit 1 and bit 6 are not used and are always treated as 0; therefore, the range of <value> are the decimal numbers corresponding to the binary numbers ranging from 00000000 (0 in decimal) to 11111111 (255 in decimal) and of which bit 1 and bit 6 are 0.

Return Format

The query returns an integer. The integer equals to the binary-weighted sum of all the bits set in the register. For example, the query returns 144 if Bit 4 (16 in decimal) and Bit 7 (128 in decimal) are enabled.

Example

The following command sets the enable register for the standard event status register to 16.

*ESE 16

The following query returns 16.

*ESE?

*ESR?

Syntax

*ESR?

Description

Queries and clears the event register for the standard event status register.

Remarks

Bit 1 and Bit 6 in the standard event status register are not in use, and are regarded as 0. The query returns a decimal value that corresponds to the binary values ranging from 00000000 (0 in decimal) to 11111111

(255 in decimal) and of which Bit 1 and Bit 6 are 0.

Return Format

The query returns an integer. The integer equals to the binary-weighted sum of all the bits set in the register. For example, the query returns 144 if Bit 4 (16 in decimal) and Bit 7 (128 in decimal) are enabled.

Example

The following query returns 24 (Bit 3 and Bit 4 have been set).

*ESR?

*IDN?

Syntax

*IDN?

Description

Queries the ID string of instrument.

Return Format

The query returns the ID string in the following format:

RIGOL TECHNOLOGIES,<model>,<serial number>,XX.XX.XX

<model>: instrument model

<serial number>: serial number of the instrument

XX.XX.XX: software version of the instrument

Example

The following query returns RIGOL TECHNOLOGIES,RSA814,RSA8004000000,00.00.25.

*IDN?

*OPC

Syntax

*OPC

*OPC?

Description

Sets Bit 0 (Operation Complete, OPC) in the standard event status register to 1 after the current operation is finished.

Queries whether the current operation is finished.

Return Format

The query returns 1 after the current operation is finished; otherwise, the query returns 0.

*RCL

Syntax

*RCL <integer>

Description

Recalls the selected register.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 16	—

Example

The following command recalls Register 1.

*RCL 1

RST*Syntax**

*RST

Description

Restores the instrument to its factory default settings.

SAV*Syntax**

*SAV <integer>

Description

Saves the current instrument state to the selected register.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 16	—

Example

The following command saves the current instrument state to Register 1.

*SAV 1

SRE*Syntax**

*SRE <value>

*SRE?

Description

Sets the enable register for the status byte register.

Queries the bits in the service request register.

Parameter

Name	Type	Range	Default
<value>	Integer	Refer to "Remarks"	0

Remarks

Bit 0 and Bit 1 are not used and are always treated as 0; therefore, the range of <value> are the decimal numbers corresponding to the binary numbers ranging from 00000000 (0 in decimal) to 11111111 (255 in decimal) and of which Bit 0 and Bit 1 are 0.

Return Format

The query returns an integer. The integer equals to the binary-weighted sum of all the bits set in the register.

For example, the query returns 144 if Bit 4 (16 in decimal) and Bit 7 (128 in decimal) are enabled.

Example

The following command sets the enable register for the status byte register to 16.

***SRE 16**

The following query returns 16.

*SRE?

STB?*Syntax**

*STB?

Description

Queries the event register for the status byte register.

Remarks

Bit 0 and Bit 1 in the status byte register are not in use, and are regarded as 0. The query returns a decimal value that corresponds to the binary values ranging from 00000000 (0 in decimal) to 11111111 (255 in decimal) and of which Bit 0 and Bit 1 are 0.

Return Format

The query returns an integer. The integer equals to the binary-weighted sum of all the bits set in the register. For example, the query returns 144 if Bit 4 (16 in decimal) and Bit 7 (128 in decimal) are enabled.

Example

The following query returns 24 (Bit 3 and Bit 4 have been set).

*STB?

TST?*Syntax**

*TST?

Description

Queries whether the self-check operation is finished.

Remarks

The query returns 0 or 1. A zero is returned if the test is successful, 1 if it fails.

WAI*Syntax**

*WAI

Description

Waits for all the pending operations to complete before executing any additional commands.

:GPIB:PARSe:END**Syntax**

:GPIB:PARSe:END

Description

The GPIB module command. This instruction set sends the "Parse End" command to the GPIB module. If this command is not sent, the USB-GPIB adapter module fails to work. You will receive no return value after sending a command.

:INITiate Commands

:INITiate:FSCan:CLEar:IMMediate

Syntax

:INITiate:FSCan:CLEar:IMMediate

Description

Deletes all the signals in the signal list and launches the selected scan sequence.

:INITiate1:CONTInuous

Syntax

:INITiate1:CONTInuous <bool>

:INITiate1:CONTInuous?

Description

Sets the meter measurement mode to continuous (ON|1) or single (OFF|0).

Queries the meter measurement mode.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command sets the meter measurement mode to Continuous.

:INITiate1:CONTInuous ON or :INITiate1:CONTInuous 1

The following query returns 1.

:INITiate1:CONTInuous?

:INITiate2:CONTInuous

Syntax

:INITiate2:CONTInuous <bool>

:INITiate2:CONTInuous?

Description

Selects continuous (ON|1) or single (OFF|0) sweep mode.

Queries the current sweep mode.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command sets the instrument to sweep continuously.

:INITiate2:CONTInuous ON or :INITiate2:CONTInuous 1

The following query returns 1.
:INITiate2:CONTInuous?

:INITiate2:REStart

Syntax

:INITiate2:IMMediate
:INITiate2:REStart

Description

Starts scan, search, or the final measurement according to the selected scan sequence.

:INPut Commands

:INPut:IF:OVERload?

Syntax

:INPut:IF:OVERload?

Description

Queries the IF overload.

Remarks

The query returns 0 or 1. 0 indicates not overloaded; 1 indicates overloaded.

:INSTRument Commands

:INSTRument:COUPle:FREQuency:CENTer

Syntax

:INSTRument:COUPle:FREQuency:CENTer <enum>

:INSTRument:COUPle:FREQuency:CENTer?

Description

Sets the status of the global center frequency of the instrument.

Queries the status of the global center frequency of the instrument.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ALL NONE	NONE

Remarks

NONE: turns off the global center frequency.

ALL: turns on the global center frequency.

If you execute this command in any mode, the center frequency of the current mode is set to the global center frequency. Adjusting the center frequency in a mode, while the global center frequency is on, will modify the global center frequency.

Return Format

The query returns ALL or NONE.

Example

The following command enables the global center frequency of the instrument.

```
:INSTRument:COUPle:FREQuency:CENTer ALL
```

The following query returns ALL.

```
:INSTRument:COUPle:FREQuency:CENTer?
```

:INSTRument:SCReen:CATalog?

Syntax

:INSTRument:SCReen:CATalog?

Description

Queries the available measurement modes displayed at the bottom of the screen.

:INSTRument:SCReen:CREate

Syntax

:INSTRument:SCReen:CREate

Description

Creates a new measurement mode label at the bottom of the screen.

:INSTRument:SCReen:DELeTe

Syntax

:INSTrument:SCReen:DELeTe

Description

Deletes the currently selected measurement mode label at the bottom of the screen.

:INSTrument:SCReen:DELeTe:ALL**Syntax**

:INSTrument:SCReen:DELeTe:ALL

Description

Deletes all the currently not selected measurement mode label at the bottom of the screen.

:INSTrument:SCReen:SELeCt**Syntax**

:INSTrument:SCReen:SELeCt <name>
:INSTrument:SCReen:SELeCt?

Description

Switches to the specified screen.
Queries the currently selected screen.

Parameter

Name	Type	Range	Default
<name>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	-

Remarks

You can run the *:INSTrument:SCReen:CATalog?* command to query the measurement mode label name.

Example

The following command sets to select measurement mode label RTSA 1 at the bottom of the screen.

:INSTrument:SCReen:SELeCt RTSA 1

The following query returns RTSA 1.

:INSTrument:SCReen:SELeCt?

:INSTrument[:SELeCt]**Syntax**

:INSTrument[:SELeCt] <enum>
:INSTrument[:SELeCt]?

Description

Selects the working mode of the instrument.
Queries the working mode of the instrument.

Parameter

Name	Type	Range	Default
<enum>	Discrete	SA GPSA_TG RTSA RTSA_UFS GPSA_ACP GPSA_CNR GPSA_CHPower GPSA_TOI GPSA_HARModist GPSA_OBW GPSA_TPOWer EMI VSA AM FM PM PNOISE	SA

Remarks

After running the command of switching the working mode, we recommend you set the timeout value to 8 s, or perform the next operation after a delay of 8 s.

Example

The following command sets the working mode of the instrument to EMI.

```
:INSTrument:SELEct EMI
```

The following query returns EMI or 12.

```
:INSTrument:SELEct?
```

:MMEMory Commands

:MMEMory:STORe:SCAN

Syntax

:MMEMory:STORe:SCAN <filename>

Description

Saves the scan table with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/scantable).

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves the scan table with the specified filename "scantable1" to the folder (/emi/scantable).

:MMEMory:STORe:SCAN scantable1

:MMEMory:STORe:SLISt

Syntax

:MMEMory:STORe:SLISt <filename>

Description

Saves the signal list with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/signallist).

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves signallist1 to the folder /emi/signallist.

:MMEMory:STORe:SLISt signallist1

:MMEMory:STORe:FSCAN:REPort

Syntax

:MMEMory:STORe:FSCAN:REPort <filename>

Description

Saves the EMC measurement report with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/measdata).

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves the EMC measurement report with the specified filename "measdata1" to the folder (/emi/measdata).

```
:MMEMory:STORe:FSCAN:REPort measdata1
```

:MMEMory:STORe:STATe**Syntax**

```
:MMEMory:STORe:STATe <file_name>
```

Description

Saves the current instrument state with the specified filename suffixed with ".sta" to the default path (/emi/state).

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	—

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves the current instrument state with the filename "state.sta" to the folder (/emi/state).

```
:MMEMory:STORe:STATe state
```

:MMEMory:STORe:TRACe:DATA**Syntax**

```
:MMEMory:STORe:TRACe:DATA <label>,<file_name>
```

Description

Saves the trace measurement data with a specified filename suffixed with ".csv" to the default path (/emi/measdata).

Parameter

Name	Type	Range	Default
<label>	Discrete	TRACE1 TRACE2 TRACE3	—
<file_name>	ASCII String	—	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves Trace1 measurement data with the specified filename "mydata.csv" to the

folder (/emi/measdata).
:MMEMory:STORe:TRACe:DATA TRACE1,mydata

:MMEMory:STORe:CORRection

Syntax

:MMEMory:STORe:CORRection <label>,<file_name>

Description

Saves the amplitude correction data of the current limit line with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/limit).

Parameter

Name	Type	Range	Default
<label>	Discrete	LLINE1 LLINE2 LLINE3 LLINE4 LLINE5 LLINE6	——
<file_name>	ASCII String	——	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves the amplitude correction data of Limit1 with the filename "low" to the folder (/emi/limit).

:MMEMory:STORe:CORRection LLINE1,low

:MMEMory:STORe:LIMit

Syntax

:MMEMory:STORe:LIMit <label>,<file_name>

Description

Saves the currently edited limit line with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/limit).

Parameter

Name	Type	Range	Default
<label>	Discrete	LLINE1 LLINE2 LLINE3 LLINE4 LLINE5 LLINE6	——
<file_name>	ASCII String	——	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves Limit1 data with the filename "low" to the folder (/emi/limit).

:MMEMory:STORe:LIMit LLINE1,low

:MMEMory:STORe:SIGNal

Syntax

:MMEMory:STORe:SIGNal <file_name>

Description

Saves the signal with a specified filename suffixed with ".csv" by default (you do not have to add the suffix manually) to the default path (/emi/measdata).

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	--

Remarks

If the specified file already exists, overwrite it.

Example

The following command saves the signal with the specified filename "PT1" to the folder (/emi/measdata).
:MMEMory:STORe:SIGNal PT1

:MMEMory:STORe:IMG:PNG

Syntax

:MMEMory:STORe:IMG:PNG <path>

Description

Saves the screen image to the specified path.

Parameter

Name	Type	Range	Default
<path>	ASCII String	—	--

:MMEMory:STORe:SCReen

Syntax

:MMEMory:STORe:SCReen <file>

Description

Saves the current screen image with the specified filename suffixed with "*.jpg", "*.png/", or "*.bmp" to the default path (/emi/screen).

Parameter

Name	Type	Range	Default
<file>	ASCII String	—	—

Remarks

If the specified file already exists, overwrite it.

If a suffix (.jpg/.png/.bmp) is added to the filename, you can save the current screen image with a different format based on its different suffix.

If no suffix is added to the filename, then by default, the current screen image is saved in the currently selected format.

Example

The following command saves the current screen image with the filename "screen.jpg" to the folder (/emi/screen).

:MMEMory:STORe:SCReen screen.jpg

:MMEMory:STORe:SCReen:DATA?

Syntax

:MMEMory:STORe:SCReen:DATA?

Description

Saves the screen data.

:MMEMory:STORe:STATe?

Syntax

:MMEMory:STORe:STATe?

Description

Obtains the status register.

:MMEMory:STORe:TRACe?

Syntax

:MMEMory:STORe:TRACe?

Description

Obtains the trace register.

:MMEMory:LOAD:SCAN

Syntax

:MMEMory:LOAD:SCAN <file_name>

Description

Loads the specified scan table file suffixed with "*.csv".

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	—	—

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the scan table file (scan1.csv) to the instrument.

:MMEMory:LOAD:SCAN scan.csv

:MMEMory:LOAD:SLISt

Syntax

:MMEMory:LOAD:SLISt <file_name>

Description

Loads the specified signal list file suffixed with "*.csv".

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	——	--

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the signal list file (slist1.csv) to the instrument.

```
:MMEMory:LOAD:SLIST slist.csv
```

:MMEMory:LOAD:STATe**Syntax**

```
:MMEMory:LOAD:STATe <file_name>
```

Description

Loads the specified state file suffixed with "*.sta".

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	——	--

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the state file (state1.sta) to the instrument.

```
:MMEMory:LOAD:STATe state1.sta
```

:MMEMory:LOAD:TRACe:DATA**Syntax**

```
:MMEMory:LOAD:TRACe:DATA <label>,<file_name>
```

Description

Loads the specified measurement data file (suffixed with .csv).

Parameter

Name	Type	Range	Default
<label>	Discrete	TRACE1 TRACE2 TRACE3	——
<file_name>	ASCII String	——	——

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the measurement data file (trace1.csv) to Trace1.

```
:MMEMory:LOAD:TRACe:DATA TRACE1,measdata1.csv
```

:MMEMory:LOAD:LIMit**Syntax**

```
:MMEMory:LOAD:LIMit <label>,<file_name>
```

Description

Loads the edited limit line file (.csv).

Parameter

Name	Type	Range	Default
<label>	Discrete	LLINE1 LLINE2 LLINE3 LLINE4 LLINE5 LLINE6	——
<file_name>	ASCII String	——	--

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the limit line file (limlt1.csv) to Limit1.

```
:MMEMory:LOAD:LIMit LLINE1,limlt1.csv
```

:MMEMory:LOAD:CORRection**Syntax**

```
:MMEMory:LOAD:CORRection <label>,<file_name>
```

Description

Loads the data from the specified file suffixed with "*.csv" to carry out amplitude correction.

Parameter

Name	Type	Range	Default
<label>	Discrete	1 2 3 4	——
<file_name>	ASCII String	——	--

Remarks

The parameter <label> indicates the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the antenna amplitude correction file "correction1.csv" to the instrument.

```
:MMEMory:LOAD:CORRection 1,correction1.csv
```

:MMEMory:LOAD:SIGNaI**Syntax**

```
:MMEMory:LOAD:SIGNaI <file_name>
```

Description

Loads the specified signal data file suffixed with "*.csv".

Parameter

Name	Type	Range	Default
<file_name>	ASCII String	——	--

Remarks

This operation fails if the file with the specified filename does not exist.

Example

The following command loads the signal list file (signallist.csv) to the instrument.
:MMEMory:LOAD:SIGNal signallist.csv

:MMEMory:USER:STORE

Syntax

:MMEMory:USER:STORE <user>
:MMEMory:USER:STORE?

Description

Sets the preset settings.
Queries the preset settings.

Parameter

Name	Type	Range	Default
<user>	Discrete	DEF USER1 USER2 USER3 USER4 USER5 USER6	DEF

Example

The following command selects USER1.
:MMEMory:USER:STORE USER1

The following query returns USER1.
:MMEMory:USER:STORE?

:MMEMory:FSCan:REPort:TEMPerature

Syntax

:MMEMory:FSCan:REPort:TEMPerature <string>
:MMEMory:FSCan:REPort:TEMPerature?

Description

Sets the temperature in the EMC report.
Queries the temperature in the EMC report.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the temperature in the EMC report in strings.

Example

The following command sets the temperature in the EMC report to 25°C.
:MMEMory:FSCan:REPort:TEMPerature 25

The following query returns 25.
:MMEMory:FSCan:REPort:TEMPerature?

:MMEMory:FSCan:REPort:TEMPerature:STATE

Syntax

:MMEMory:FSCan:REPort:TEMPerature:STATE <bool>

:MMEMory:FSCan:REPort:TEMPerature:STATe?

Description

Sets whether to display temperature in the EMC report.
Queries whether to display temperature in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the temperature in the EMC report.

:MMEMory:FSCan:REPort:TEMPerature:STATe ON or :MMEMory:FSCan:REPort:TEMPerature:STATe 1

The following query returns 1.

:MMEMory:FSCan:REPort:TEMPerature:STATe?

:MMEMory:FSCan:REPort:HUMIdity

Syntax

:MMEMory:FSCan:REPort:HUMIdity <string>

:MMEMory:FSCan:REPort:HUMIdity?

Description

Sets the humidity in the EMC report.
Queries the humidity in the EMC report.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the humidity in the EMC report in strings.

Example

The following command sets the humidity in the EMC report to 50%.

:MMEMory:FSCan:REPort:HUMIdity 50

The following query returns 50.

:MMEMory:FSCan:REPort:HUMIdity?

:MMEMory:FSCan:REPort:HUMIdity:STATe

Syntax

:MMEMory:FSCan:REPort:HUMIdity:STATe <bool>

:MMEMory:FSCan:REPort:HUMIdity:STATe?

Description

Sets whether to display the humidity in the EMC report.

Queries whether to display the humidity in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the humidity in the EMC report.

:MMEMory:FSCan:REPort:HUMIdity:STATe ON or :MMEMory:FSCan:REPort:HUMIdity:STATe 1

The following query returns 1.

:MMEMory:FSCan:REPort:HUMIdity:STATe?

:MMEMory:FSCan:REPort:LOCAtion

Syntax

:MMEMory:FSCan:REPort:LOCAtion <string>

:MMEMory:FSCan:REPort:LOCAtion?

Description

Sets the testing place of the EMC measurement.

Queries the testing place of the EMC measurement.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the testing place of EMC measurement in strings.

Example

The following command sets the testing place of EMC measurement to Room1.

:MMEMory:FSCan:REPort:LOCAtion Room1

The following query returns Room1.

:MMEMory:FSCan:REPort:LOCAtion?

:MMEMory:FSCan:REPort:LOCAtion:STATe

Syntax

:MMEMory:FSCan:REPort:LOCAtion:STATe <bool>

:MMEMory:FSCan:REPort:LOCAtion:STATe?

Description

Sets whether to display the testing place in the EMC report.

Queries whether to display the testing place in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the testing place in the EMC report.

```
:MMEMory:FSCan:REPort:LOCAtion:STATe ON or
```

```
:MMEMory:FSCan:REPort:LOCAtion:STATe 1
```

The following query returns 1.

```
:MMEMory:FSCan:REPort:LOCAtion:STATe?
```

:MMEMory:FSCan:REPort:DISTance**Syntax**

```
:MMEMory:FSCan:REPort:DISTance <string>
```

```
:MMEMory:FSCan:REPort:DISTance?
```

Description

Sets the testing distance of the EMC measurement.

Queries the testing distance of the EMC measurement.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the testing distance of EMC measurement in strings.

Example

The following command sets the testing distance of EMC measurement to 5 mm.

```
:MMEMory:FSCan:REPort:DISTance 0.005
```

The following query returns 0.005.

```
:MMEMory:FSCan:REPort:DISTance?
```

:MMEMory:FSCan:REPort:DISTance:STATe**Syntax**

```
:MMEMory:FSCan:REPort:DISTance:STATe <bool>
```

```
:MMEMory:FSCan:REPort:DISTance:STATe?
```

Description

Sets whether to display the testing distance in the EMC report.

Queries whether to display the testing distance in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the testing distance in the EMC report.

:MMEMory:FSCan:REPort:DISTance:STATe ON or :MMEMory:FSCan:REPort:DISTance:STATe 1

The following query returns 1.

:MMEMory:FSCan:REPort:DISTance:STATe?

:MMEMory:FSCan:REPort:POLArization

Syntax

:MMEMory:FSCan:REPort:POLArization <string>

:MMEMory:FSCan:REPort:POLArization?

Description

Sets the EMC polar direction.

Queries the EMC polar direction.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the EMC polar direction in strings.

Example

The following command sets the EMC polar direction to Vertical.

:MMEMory:FSCan:REPort:POLArization Vertical

The following query returns Vertical.

:MMEMory:FSCan:REPort:POLArization?

:MMEMory:FSCan:REPort:POLArization:STATe

Syntax

:MMEMory:FSCan:REPort:POLArization:STATe <bool>

:MMEMory:FSCan:REPort:POLArization:STATe?

Description

Sets whether to display the polar direction in the EMC report.

Queries whether to display the polar direction in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the polar direction in the EMC report.

:MMEMory:FSCan:REPort:POLArization:STATe ON or :MMEMory:FSCan:REPort:POLArization:STATe 1

The following query returns 1.

:MMEMory:FSCan:REPort:POLArization:STATe?

:MMEMory:FSCan:REPort:NOTE

Syntax

:MMEMory:FSCan:REPort:NOTE <string>

:MMEMory:FSCan:REPort:NOTE?

Description

Sets other explanations for the EMC measurement.

Queries other explanations for the EMC measurement.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns other explanations for the EMC measurement in strings.

Example

The following command sets other explanations for the EMC measurement to None.

:MMEMory:FSCan:REPort:NOTE None

The following query returns None.

:MMEMory:FSCan:REPort:NOTE?

:MMEMory:FSCan:REPort:NOTE:STATe

Syntax

:MMEMory:FSCan:REPort:NOTE:STATe <bool>

:MMEMory:FSCan:REPort:NOTE:STATe?

Description

Sets whether to display other explanations in the EMC report.

Queries whether to display other explanations in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of other explanations in the EMC report.

:MMEMory:FSCan:REPort:NOTE:STATe ON or :MMEMory:FSCan:REPort:NOTE:STATe 1

The following query returns 1.

:MMEMory:FSCan:REPort:NOTE:STATe?

:MMEMory:FSCan:REPort:CLient

Syntax

:MMEMory:FSCan:REPort:CLlent <string>
 :MMEMory:FSCan:REPort:CLlent?

Description

Sets the client information in the EMC report.
 Queries the client information in the EMC report.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the client information in the EMC report in strings.

Example

The following command sets the client information in the EMC report to Customer1.
 :MMEMory:FSCan:REPort:CLlent Customer1

The following query returns Customer1.
 :MMEMory:FSCan:REPort:CLlent?

:MMEMory:FSCan:REPort:CLlent:STATe

Syntax

:MMEMory:FSCan:REPort:CLlent:STATe <bool>
 :MMEMory:FSCan:REPort:CLlent:STATe?

Description

Sets whether to display client information in the EMC report.
 Queries whether to display client information in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of client information in the EMC report.
 :MMEMory:FSCan:REPort:CLlent:STATe ON or
 :MMEMory:FSCan:REPort:CLlent:STATe 1

The following query returns 1.
 :MMEMory:FSCan:REPort:CLlent:STATe?

:MMEMory:FSCan:REPort:OPERator

Syntax

:MMEMory:FSCan:REPort:OPERator <string>
 :MMEMory:FSCan:REPort:OPERator?

Description

Sets the operator in the EMC report.
Queries the operator in the EMC report.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the operator in the EMC report in strings.

Example

The following command sets the operator in the EMC report to Operator1.

```
:MMEMory:FSCan:REPort:OPERator Operator1
```

The following query returns Operator1.

```
:MMEMory:FSCan:REPort:OPERator?
```

:MMEMory:FSCan:REPort:OPERator:STATe

Syntax

```
:MMEMory:FSCan:REPort:OPERator:STATe <bool>
```

```
:MMEMory:FSCan:REPort:OPERator:STATe?
```

Description

Sets whether to display operator in the EMC report.
Queries whether to display operator in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the operator in the EMC report.

```
:MMEMory:FSCan:REPort:OPERator:STATe ON or :MMEMory:FSCan:REPort:OPERator:STATe 1
```

The following query returns 1.

```
:MMEMory:FSCan:REPort:OPERator:STATe?
```

:MMEMory:FSCan:REPort:PDEscription

Syntax

```
:MMEMory:FSCan:REPort:PDEscription <string>
```

```
:MMEMory:FSCan:REPort:PDEscription?
```

Description

Sets the product description in the EMC report.
Queries the product description in the EMC report.

Parameter

Name	Type	Range	Default
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Return Format

The query returns the product descriptions in the EMC report in strings.

Example

The following command sets the product description in the EMC report to Product1.

```
:MMEMory:FSCan:REPort:PDEscription Product1
```

The following query returns Product1.

```
:MMEMory:FSCan:REPort:PDEscription?
```

:MMEMory:FSCan:REPort:PDEscription:STATe**Syntax**

```
:MMEMory:FSCan:REPort:PDEscription:STATe <bool>
```

```
:MMEMory:FSCan:REPort:PDEscription:STATe?
```

Description

Sets whether to display the product description in the EMC report.

Queries whether to display the product description in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the product description in the EMC report.

```
:MMEMory:FSCan:REPort:PDEscription:STATe ON or :MMEMory:FSCan:REPort:PDEscription:STATe 1
```

The following query returns 1.

```
:MMEMory:FSCan:REPort:PDEscription:STATe?
```

:MMEMory:FSCan:REPort:CORRection:MODE**Syntax**

```
:MMEMory:FSCan:REPort:CORRection:MODE <enum>
```

```
:MMEMory:FSCan:REPort:CORRection:MODE?
```

Description

Sets the amplitude correction in the EMC report.

Queries the amplitude correction in the EMC report.

Parameter

Name	Type	Range	Default
<user>	Discrete	OFF DATA	OFF

Example

The following command sets the amplitude correction in the EMC report to Full Data.

```
:MMEMory:FSCan:REPort:CORRection:MODE DATA
```

The following query returns DATA.

```
:MMEMory:FSCan:REPort:CORRection:MODE?
```

:MMEMory:FSCan:REPort:LIMits:MODE**Syntax**

```
:MMEMory:FSCan:REPort:LIMits:MODE <enum>
```

```
:MMEMory:FSCan:REPort:LIMits:MODE?
```

Description

Sets the limit line in the EMC report.

Queries the limit line in the EMC report.

Parameter

Name	Type	Range	Default
<user>	Discrete	OFF DATA	OFF

Example

The following command sets the limit line in the EMC report to Full Data.

```
:MMEMory:FSCan:REPort:LIMits:MODE DATA
```

The following query returns DATA.

```
:MMEMory:FSCan:REPort:LIMits:MODE?
```

:MMEMory:FSCan:REPort:SCReen:MODE**Syntax**

```
:MMEMory:FSCan:REPort:SCReen:MODE <enum>
```

```
:MMEMory:FSCan:REPort:SCReen:MODE?
```

Description

Set the screen mode in the EMC report.

Queries the screen mode in the EMC report.

Parameter

Name	Type	Range	Default
<user>	Discrete	OFF INVerted NORMAl	OFF

Example

The following command sets the screen mode in the EMC report to NORMAl.

```
:MMEMory:FSCan:REPort:SCReen:MODE NORMAl
```

The following query returns NORMAl.

```
:MMEMory:FSCan:REPort:SCReen:MODE?
```

:MMEMory:FSCan:REPort:SCAN

Syntax

:MMEMory:FSCan:REPort:SCAN <bool>

:MMEMory:FSCan:REPort:SCAN?

Description

Sets whether to display the scan table in the EMC report.

Queries whether to display the scan table in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the scan table in the EMC report.

:MMEMory:FSCan:REPort:SCAN ON or :MMEMory:FSCan:REPort:SCAN 1

The following query returns 1.

:MMEMory:FSCan:REPort:SCAN?

:MMEMory:FSCan:REPort:SLISt**Syntax**

:MMEMory:FSCan:REPort:SLISt <bool>

:MMEMory:FSCan:REPort:SLISt?

Description

Sets whether to display the signal list in the EMC report.

Queries whether to display the signal list in the EMC report.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the display of the signal list in the EMC report.

:MMEMory:FSCan:REPort:SLISt ON or :MMEMory:FSCan:REPort:SLISt 1

The following query returns 1.

:MMEMory:FSCan:REPort:SLISt?

:MMEMory:FSCan:REPort:OUTPut**Syntax**

:MMEMory:FSCan:REPort:OUTPut <enum>

:MMEMory:FSCan:REPort:OUTPut?

Description

Sets the output format of the EMC report.
Queries the output format of the EMC report.

Parameter

Name	Type	Range	Default
<user>	Discrete	HTML PDF	HTML

Example

The following command sets the output format of the EMC report to PDF.
:MMEMory:FSCan:REPort:OUTPut PDF

The following query returns PDF.
:MMEMory:FSCan:REPort:OUTPut?

[[:SENSe] Commands

[[:SENSe]:FREQuency:SPAN

Syntax

[[:SENSe]:FREQuency:SPAN <freq>
[:SENSe]:FREQuency:SPAN?

Description

Sets the span.
Queries the span.

Parameter

Name	Type	Range	Default
<freq>	Real	5 Hz to $F_{\max}$	970 MHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the span in scientific notation. The unit is Hz.

Example

The following command sets the span to 20 MHz.
[:SENSe:FREQuency:SPAN 20000000

The following query returns 2.000000000e+07.
[:SENSe:FREQuency:SPAN?

[[:SENSe]:FREQuency:CENTer

Syntax

[[:SENSe]:FREQuency:CENTer <freq>
[:SENSe]:FREQuency:CENTer?

Description

Sets the frequency(Meter).
Queries the frequency(Meter).

Parameter

Name	Type	Range	Default
<freq>	Real	0 Hz to $F_{\max}$	515 MHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the frequency of the meter in real number. The unit is Hz.

Example

The following command sets the frequency of the meter to 1 MHz.
[:SENSe:FREQuency:CENTer 1000000

The following query returns 1000000.000000.
[:SENSe:FREQuency:CENTer?

[[:SENSe]:FREQuency:STARt

Syntax

[[:SENSe]:FREQuency:STARt <freq>
[:SENSe]:FREQuency:STARt?

Description

Sets the start frequency.
Queries the start frequency.

Parameter

Name	Type	Range ^[1]	Default
<freq>	Real	0 Hz to ($F_{\max}$ - 10 Hz)	30 MHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the start frequency in real number. The unit is Hz.

Example

The following command sets the start frequency to 100 MHz.
:SENSe:FREQuency:STARt 100000000

The following query returns 100000000.000000.
:SENSe:FREQuency:STARt?

[[:SENSe]:FREQuency:STARt:AUTO

Syntax

[[:SENSe]:FREQuency:STARt:AUTO <bool>
[:SENSe]:FREQuency:STARt:AUTO?

Description

Enables or disables the auto coupling of the start frequency.
Queries the start frequency mode.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the auto coupling of the start frequency.
:SENSe:FREQuency:STARt:AUTO ON or :SENSe:FREQuency:STARt:AUTO 1

The following query returns 1.
:SENSe:FREQuency:STARt:AUTO?

[:SENSe]:FREQuency:STOP

Syntax

```
[:SENSe]:FREQuency:STOP <freq>
[:SENSe]:FREQuency:STOP?
```

Description

Sets the stop frequency.
Queries the stop frequency.

Parameter

Name	Type	Range ^[1]	Default
<freq>	Real	10 Hz to $F_{\max}$	1 GHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the stop frequency in real number. The unit is Hz.

Example

The following command sets the stop frequency to 10 MHz.
:SENSe:FREQuency:STOP 10000000

The following query returns 10000000.000000.
:SENSe:FREQuency:STOP?

[:SENSe]:FREQuency:STOP:AUTO

Syntax

```
[:SENSe]:FREQuency:STOP:AUTO <bool>
[:SENSe]:FREQuency:STOP:AUTO?
```

Description

Enables or disables the auto coupling of the stop frequency.
Queries the stop frequency mode.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the auto coupling of the stop frequency.
:SENSe:FREQuency:STOP:AUTO ON or :SENSe:FREQuency:STOP:AUTO 1

The following query returns 1.
:SENSe:FREQuency:STOP:AUTO?

[:SENSe]:FREQuency:MIDSpan

Syntax

```
[[:SENSe]:FREQuency:MIDSpan <freq>
[:SENSe]:FREQuency:MIDSpan?
```

Description

Sets the midspan frequency.

Queries the midspan frequency.

Parameter

Name	Type	Range	Default
<freq>	Real	5 Hz to ($F_{\max} - 5$ Hz)	515 MHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the midspan frequency in scientific notation. The unit is Hz.

Example

The following command sets the midspan frequency to 1 MHz.

```
:SENSe:FREQuency:MIDSpan 1000000
```

The following query returns 1.0E+06.

```
:SENSe:FREQuency:MIDSpan?
```

[[:SENSe]:BANDwidth|BWIDth[:RESolution]**Syntax**

```
[[:SENSe]:BANDwidth|BWIDth[:RESolution] <freq>
[:SENSe]:BANDwidth|BWIDth[:RESolution]?
```

Description

Sets the resolution bandwidth (RBW) of the meter.

Queries the resolution bandwidth (RBW) of the meter.

Parameter

Name	Type	Range	Default
<freq>	Discrete	100 Hz to 10 MHz (at 1-3-10 step)	120 kHz

Remarks

When the EMC standard is set to "None", and "Gauss" Meters Control filter is selected, the RBW range is as above.

When "EMI" is selected, the resolution bandwidth can only be set to 200 Hz, 9 kHz, 120 kHz, or 1 MHz.

Return Format

The query returns the resolution bandwidth in real number. Its unit is Hz.

Example

The following command sets RBW to 1000 Hz.

```
:SENSe:BANDwidth:RESolution 1000
```

```
:SENSe:BWIDth:RESolution 1000
```

The following query returns 1000.000000.

```
:SENSe:BANDwidth:RESolution?
```

```
:SENSe:BWIDth:RESolution?
```

[[:SENSe]:BANDwidth|BWIDth[:RESolution]:AUTO

Syntax

[[:SENSe]:BANDwidth|BWIDth[:RESolution]:AUTO <bool>
[:SENSe]:BANDwidth|BWIDth[:RESolution]:AUTO?

Description

Enables or disables the auto setting mode of RBW(Meter).
Queries the RBW mode(Meter).

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Remarks

In auto mode, the resolution bandwidth changes with the span.

Return Format

The query returns 0 or 1.

Example

The following command enables the auto setting mode of RBW.

:SENSe:BANDwidth:RESolution:AUTO ON or :SENSe:BANDwidth:RESolution:AUTO 1
:SENSe:BWIDth:RESolution:AUTO ON or :SENSe:BWIDth:RESolution:AUTO 1

The following query returns 1.

:SENSe:BANDwidth:RESolution:AUTO?
:SENSe:BWIDth:RESolution:AUTO?

[[:SENSe]:BANDwidth|BWIDth:SHAPE

Syntax

[[:SENSe]:BANDwidth|BWIDth:SHAPE <enum>
[:SENSe]:BANDwidth|BWIDth:SHAPE?

Description

Sets the filter type of the meter.
Queries the filter type of the meter.

Parameter

Name	Type	Range	Default
<enum>	Discrete	GAUSSian EMI	EMI

Return Format

The query returns GAUS or EMI.

Example

The following command sets the filter type of the meter to GAUSSian.

:SENSe:BANDwidth:SHAPE GAUSSian
:SENSe:BWIDth:SHAPE GAUSSian

The following query returns GAUS.

:SENSe:BANDwidth:SHAPE?
:SENSe:BWIDth:SHAPE?

[[:SENSe]:POWer[:RF]:ATTenuation

Syntax

```
[[:SENSe]:POWer[:RF]:ATTenuation <real>
[:SENSe]:POWer[:RF]:ATTenuation?
```

Description

Sets the attenuation of the RF front-end attenuator.
Queries the attenuation of the RF front-end attenuator.

Parameter

Name	Type	Range	Default
<real>	Integer	0 dB to 30 dB	10 dB

Return Format

The query returns the attenuation in integer. The unit is dB.

Example

The following command sets the attenuation to 20 dB.

```
:SENSe:POWer:RF:ATTenuation 20
```

The following query returns 20.

```
:SENSe:POWer:RF:ATTenuation?
```

[[:SENSe]:POWer[:RF]:GAIN[:STATe]

Syntax

```
[[:SENSe]:POWer[:RF]:GAIN[:STATe] <bool>
[:SENSe]:POWer[:RF]:GAIN[:STATe]?
```

Description

Enables or disables the preamplifier of the meter.
Queries the on/off status of the preamplifier of the meter.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables the preamplifier.

```
:SENSe:POWer:RF:GAIN:STATe ON or :SENSe:POWer:RF:GAIN:STATe 1
```

The following query returns 1.

```
:SENSe:POWer:RF:GAIN:STATe?
```

[[:SENSe]:CORRection:IMPedance[:INPut][:MAGNitude]

Syntax

```
[[:SENSe]:CORRection:IMPedance[:INPut][:MAGNitude] <enum>
[:SENSe]:CORRection:IMPedance[:INPut][:MAGNitude]?
```

Description

Sets the input impedance. Its unit is Ω .
 Queries the input impedance.

Parameter

Name	Type	Range	Default
<enum>	Discrete	50 75	50

Remarks

If the output impedance of the system under test is 75 Ω , you should use a 75 Ω to 50 Ω adapter (option) supplied by **RIGOL** to connect the analyzer with the system under test, and then set the input impedance to 75 Ω .

Return Format

The query returns 50 or 75.

Example

The following command sets the input impedance to 75 Ω .
 :SENSe:CORRection:IMPedance:INPut:MAGNitude 75

The following query returns 75.
 :SENSe:CORRection:IMPedance:INPut:MAGNitude?

[[:SENSe]:CORRection:SA[:RF]:GAIN**Syntax**

[[:SENSe]:CORRection:SA[:RF]:GAIN <rel_ampl>
 [[:SENSe]:CORRection:SA[:RF]:GAIN?

Description

Sets the external gain.
 Queries the external gain.

Parameter

Name	Type	Range	Default
<rel_ampl>	Real	-120 dB to 120 dB	0 dB

Return Format

The query returns the external gain value in scientific notation. The unit is dB.

Example

The following command sets the external gain value to 20 dB.
 :SENSe:CORRection:SA:RF:GAIN 20

The following query returns 2.000000000e+01.
 :SENSe:CORRection:SA:RF:GAIN?

[[:SENSe]:CORRection:CSET<n>[:STATe]**Syntax**

[[:SENSe]:CORRection:CSET<n>[:STATe] <bool>
 [[:SENSe]:CORRection:CSET<n>[:STATe]?

Description

Enables or disables the correction.

Queries the on/off status of the correction function.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<bool>	Bool	OFF ON 0 1	ON 1

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

Return Format

The query returns 0 or 1.

Example

The following command sets the amplitude correction to cable.

```
:SENSe:CORRection:CSET1:STATe 1 or :SENSe:CORRection:CSET1:STATe ON
```

The following query returns 1.

```
:SENSe:CORRection:CSET1:STATe?
```

[[:SENSe]:CORRection:CSET<n>:DESCRiption**Syntax**

```
[[:SENSe]:CORRection:CSET<n>:DESCRiption <string>
```

```
[[:SENSe]:CORRection:CSET<n>:DESCRiption?
```

Description

Sets the description of the amplitude correction.

Queries the description of the amplitude correction.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Other, and 4 indicates User.

Return Format

The query returns the amplitude correction description in ASCII strings.

Example

The following command sets the amplitude correction description to Rigol.

```
:SENSe:CORRection:CSET1:DESCRiption Rigol
```

The following query returns Rigol.

```
:SENSe:CORRection:CSET1:DESCRiption?
```

[[:SENSe]:CORRection:CSET<n>:COMMeNt

Syntax

[[:SENSe]:CORRection:CSET<n>:COMMeNt <string>

[[:SENSe]:CORRection:CSET<n>:COMMeNt?

Description

Sets the comments of the amplitude correction.

Queries the comments of the amplitude correction.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

Return Format

The query returns the comments of the amplitude correction in ASCII strings.

Example

The following command sets the amplitude correction comments to Rigol.

[[:SENSe]:CORRection:CSET1:COMMeNt Rigol

The following query returns Rigol.

[[:SENSe]:CORRection:CSET1:COMMeNt?

[[:SENSe]:CORRection:CSET<n>:X:SPACIng

Syntax

[[:SENSe]:CORRection:CSET<n>:X:SPACIng <enum>

[[:SENSe]:CORRection:CSET<n>:X:SPACIng?

Description

Sets the frequency interpolation type.

Queries the frequency interpolation type.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<enum>	Discrete	LINear LOG	LINear

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

LINear: linear type;

LOG: log type.

Return Format

The query returns LIN or LOG.

Example

The following command sets the amplitude interpolation type of the antenna amplitude correction to LOG.

:SENSe:CORRection:CSET1:X:SPACing LOG

The following query returns LOG.

:SENSe:CORRection:CSET1:X:SPACing?

[[:SENSe]:CORRection:CSET<n>:DATA

Syntax

[[:SENSe]:CORRection:CSET<n>:DATA <string>

[[:SENSe]:CORRection:CSET<n>:DATA?

Description

Sets the amplitude correction data list.

Queries the amplitude correction data list.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

Return Format

The query returns the list table of the amplitude correction in ASCII strings.

Example

The following command sets the amplitude correction data list to 5000000000, -30, 6000000000, -50.

:SENSe:CORRection:CSET1:DATA

5000000000,-30,6000000000,-50

The following query returns 5000000000.000000,-30.000000,6000000000.000000,-50.000000.

:SENSe:CORRection:CSET1:DATA?

[[:SENSe]:CORRection:CSET<n>:DATA:MERG

Syntax

[[:SENSe]:CORRection:CSET<n>:DATA:MERG <string>

Description

Sets the amplitude correction data.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4	—
<string>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	—

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

Example

The following command sets the antenna amplitude correction data to 500000000, -30,600000000,-50.
 :SENSe:CORRection:CSET1:DATAA:MERG 500000000,-30,600000000,-50

[[:SENSe]:CORRection:CSET<n>:DELeTe

Syntax

[[:SENSe]:CORRection:CSET<n>:DELeTe

Description

Deletes the single amplitude correction data.

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

[[:SENSe]:CORRection:CSET:ALL:DELeTe

Syntax

[[:SENSe]:CORRection:CSET:ALL:DELeTe

Description

Delete all amplitude correction data.

Remarks

The parameter <n> sets the amplitude correction type. 1 indicates Antenna, 2 indicates Cable, 3 indicates Others, and 4 indicates User.

[[:SENSe]:CORRection:CSET:ALL[:STATe]

Syntax

[[:SENSe]:CORRection:CSET:ALL[:STATe] <bool>
 [[:SENSe]:CORRection:CSET:ALL[:STATe]?

Description

Enables or disables the amplitude correction.
 Queries whether to enable the amplitude correction.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the amplitude correction.

:SENSe:CORRection:CSET:ALL:STATe 1 or :SENSe:CORRection:CSET:ALL:STATe ON

The following query returns 1.

:SENSe:CORRection:CSET:ALL:STATe?

[[:SENSe]:CORRection:CSET[:ID]

Syntax

x[:SENSe]:CORRection:CSET>:ID <enum>
[:SENSe]:CORRection:CSET[:ID]?

Description

Sets the type of the amplitude correction.
Queries the type of the amplitude correction.

Parameter

Name	Type	Range	Default
<enum>	Discrete	ANTenna CABLe OTHEr USER	ANTenna

Remarks

ANTenna: Antenna amplitude correction; CABLe: Cable amplitude correction; OTHer: Other amplitude corrections; USER: user-defined amplitude correction

Return Format

The query returns ANTE, CABL, OTHE, or USER.

Example

The following command sets the amplitude correction type to OTHER.
:SENSe:CORRection:CSET:ID OTHer

The following query returns OTHE.
:SENSe:CORRection:CSET:ID?

[[:SENSe]:AVERAge:COUNT

Syntax

[[:SENSe]:AVERAge:COUNT <integer>
[:SENSe]:AVERAge:COUNT?

Description

Sets the trace average count of the current measurement.
Queries the trace average count of the current measurement.

Parameter

Name	Type	Range	Default
<integer>	Integer	1 to 10000	1

Return Format

The query returns the average count in integer.

Example

The following command sets the average count to 100.
:SENSe:AVERAge:COUNT 100

The following query returns 100.
:SENSe:AVERAge:COUNT?

[[:SENSe]:AVERAge:COUNT:CURRent?

Syntax

```
[[:SENSe]:AVERage:COUNT:CURRent?
```

Description

Queries the current average times of the average trace.

Return Format

The query returns the trace average count that has been executed in integer.

[[:SENSe]:AVERage:CLEar**Syntax**

```
[[:SENSe]:AVERage:CLEar
```

Description

Clears the average count.

[[:SENSe]:AVERage:TYPE**Syntax**

```
[[:SENSe]:AVERage:TYPE <enum>
[:SENSe]:AVERage:TYPE?
```

Description

Selects the average type of the swept SA analysis measurement.
Queries the average type of the swept SA analysis measurement.

Parameter

Name	Type	Range	Default
<enum>	Discrete	LOG RMS SCALar	LOG

Remarks

LOG: indicates log. RMS: indicates root mean square. SCALar: indicates scalar.

Return Format

The query returns LOG, RMS, or SCAL.

Example

The following command selects the average type of the swept SA analysis mode to Log.
[:SENSe]:AVERage:TYPE LOG

The following query returns LOG.
[:SENSe]:AVERage:TYPE?

[[:SENSe]:AVERage:TYPE:AUTO**Syntax**

```
[[:SENSe]:AVERage:TYPE:AUTO <bool>
[:SENSe]:AVERage:TYPE:AUTO?
```

Description

Sets the status of auto averaging.
Queries the status of auto averaging.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables the auto averaging state.

:SENSe:AVERage:TYPE:AUTO ON or :SENSe:AVERage:TYPE:AUTO 1

The following query returns 1.

:SENSe:AVERage:TYPE:AUTO?

[[:SENSe]:EMC:STANdard[:SElect]**Syntax**

[[:SENSe]:EMC:STANdard[:SElect] <enum>

[[:SENSe]:EMC:STANdard[:SElect]?

Description

Sets the EMC standard.

Queries the EMC standard.

Parameter

Name	Type	Range	Default
<enum>	Discrete	NONE CISPr	CISPr

Return Format

The query returns NONE or CISPr.

Example

The following command sets the EMC standard to CISPr.

:SENSe:EMC:STANdard:SElect CISPr

The following query returns CISPr.

:SENSe:EMC:STANdard:SElect?

[[:SENSe]:FSCan:SCAN<n>:STATe**Syntax**

[[:SENSe]:FSCan:SCAN<n>:STATe <bool>

[[:SENSe]:FSCan:SCAN<n>:STATe?

Description

Enables or disables the sweep function for the specified range.

Queries the sweep status for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables sweep for Range 1.

:SENSe:FSCan:SCAN1:STATe ON or :SENSe:FSCan:SCAN1:STATe 1

The following query returns 1.

:SENSe:FSCan:SCAN1:STATe?

[[:SENSe]:FSCan:SCAN<n>:START**Syntax**

[[:SENSe]:FSCan:SCAN<n>:START <freq>

[[:SENSe]:FSCan:SCAN<n>:START?

Description

Sets the start frequency for the specified range.

Queries the start frequency for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<freq>	Real	0 Hz to ($F_{\max}$ - 10 Hz)	30 MHz

Remarks

Fmax is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the start frequency for the specified range in real number. The unit is Hz.

Example

The following command sets the start frequency for Range 1 to 10 MHz.

:SENSe:FSCan:SCAN1:START 10000000

The following query returns 10000000.

:SENSe:FSCan:SCAN1:START?

[[:SENSe]:FSCan:SCAN<n>:STOP**Syntax**

[[:SENSe]:FSCan:SCAN<n>:STOP <freq>

[[:SENSe]:FSCan:SCAN<n>:STOP?

Description

Sets the stop frequency for the specified range.

Queries the stop frequency for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<freq>	Real	10 Hz to $F_{\max}$	1 GHz

Remarks

$F_{\max}$ is determined by the instrument model. Refer to the product model list in the Overview chapter of the document.

Return Format

The query returns the stop frequency for the specified range in real number. The unit is Hz.

Example

The following command sets the stop frequency for Range 1 to 100 MHz.

```
:SENSe:FSCan:SCAN1:STOP 100000000
```

The following query returns 100000000.

```
:SENSe:FSCan:SCAN1:STOP?
```

[[:SENSe]:FSCan:SCAN<n>:STIME**Syntax**

```
[[:SENSe]:FSCan:SCAN<n>:STIME <time>
```

```
[[:SENSe]:FSCan:SCAN<n>:STIME?
```

Description

Sets the sweep time for the specified range.

Queries the sweep time for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<time>	Real	1 ms to 4000 s	—

Return Format

The query returns the sweep time for the specified range in scientific notation. The unit is s.

Example

The following command sets the sweep time for sweep range 1 to 0.1 s.

```
:SENSe:FSCan:SCAN1:STIME 0.1
```

The following query returns +1.0000000000000000E-01.

```
:SENSe:FSCan:SCAN1:STIME?
```

[[:SENSe]:FSCan:SCAN<n>:POINTs**Syntax**

```
[[:SENSe]:FSCan:SCAN<n>:POINTs <integer>
```

```
[[:SENSe]:FSCan:SCAN<n>:POINTs?
```

Description

Sets the number of sweep points for the specified range.

Queries the number of sweep points for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<integer>	Integer	101 to 10001	Refer to "Remarks"

Remarks

The number of sweep points, by default, is determined by the following parameters in the specified range:
 sweep points = (stop frequency - start frequency)/(RBW/2)

Return Format

The query returns the number of sweep points in integer.

Example

The following command sets the number of sweep points for Range 1 to 650.
 :SENSe:FSCan:SCAN1:POINts 650

The following query returns 650.
 :SENSe:FSCan:SCAN1:POINts?

[[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation**Syntax**

[[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation <rel_ampl>
 [[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation?

Description

Sets the attenuation value for the specified range.
 Queries the attenuation value for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<rel_ampl>	Integer	0 dB to 30 dB	10 dB

Return Format

The query returns the attenuation in integer. The unit is dB.

Example

The following command sets the attenuation for Range 1 to 20 dB.
 :SENSe:FSCan:SCAN1:INPut:ATTenuation 20

The following query returns 20.
 :SENSe:FSCan:SCAN1:INPut:ATTenuation?

[[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation:AUTO**Syntax**

[[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation:AUTO <bool>
 [[:SENSe]:FSCan:SCAN<n>:INPut:ATTenuation:AUTO

Description

Enables or disables the auto attenuation mode for the specified range.
 Queries the status of the auto attenuation mode for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command disables the auto attenuation mode for Range 1.

```
:SENSe:FSCan:SCAN1:INPut:ATTenuation:AUTO
```

```
or :SENSe:FSCan:SCAN1:INPut:ATTenuation:AUTO OFF
```

0

The following query returns 0.

```
:SENSe:FSCan:SCAN1:INPut:ATTenuation:AUTO?
```

[[:SENSe]:FSCan:SCAN<n>:BANDwidth|BWIDth[:RESolution]**Syntax**

```
[[:SENSe]:FSCan:SCAN<n>:BANDwidth[:RESolution] <freq>
```

```
[[:SENSe]:FSCan:SCAN<n>:BANDwidth[:RESolution]?
```

Description

Sets the resolution bandwidth (RBW) for the specified range.

Queries the RBW for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<freq>	Discrete	100 Hz to 10 MHz (at 1-3-10 step)	120 kHz

Remarks

When the EMC standard is set to "None", and "Gauss" Meters Control filter is selected, the RBW range is as above.

When "EMI" is selected, the resolution bandwidth can only be set to 200 Hz, 9 kHz, 120 kHz, or 1 MHz.

Return Format

The query returns the resolution bandwidth for the specified range in scientific notation. Its unit is Hz.

Example

The following command sets RBW for Range 1 to 1000 Hz.

```
:SENSe:FSCan:SCAN1:BANDwidth:RESolution 1000
```

The following query returns 1.000000000e+03.

```
:SENSe:FSCan:SCAN1:BANDwidth:RESolution?
```

[[:SENSe]:FSCan:SCAN<n>:BANDwidth|BWIDth[:RESolution]:AUTO**Syntax**

```
[[:SENSe]:FSCan:SCAN<n>:BANDwidth[:RESolution]:AUTO <bool>
```

```
[[:SENSe]:FSCan:SCAN<n>:BANDwidth[:RESolution]:AUTO?
```

Description

Enables or disables the auto setting mode of RBW for the specified range.

Queries the status of the auto setting mode of RBW for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<bool>	Bool	OFF ON 0 1	ON 1

Remarks

In auto mode, the resolution bandwidth changes with the span.

Return Format

The query returns 0 or 1.

Example

The following command enables the auto setting mode of RBW for Range 1.

:SENSe:FSCan:SCAN1:BANDwidth:RESolution:AUTO

or :SENSe:FSCan:SCAN1:BANDwidth:RESolution:AUTO 1

ON

The following query returns 1.

:SENSe:FSCan:SCAN1:BANDwidth:RESolution:AUTO?

[[:SENSe]:FSCan:SCAN<n>:BANDwidth|BWIDth:SHAPE**Syntax**

[[:SENSe]:FSCan:SCAN<n>:BANDwidth:SHAPE <enum>

[[:SENSe]:FSCan:SCAN<n>:BANDwidth:SHAPE?

Description

Sets the filter type of meter for the specified range.

Queries the filter type of meter for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<enum>	Discrete	EMI GAUSSian	EMI

Return Format

The query returns EMI or GAUS.

Example

The following command sets the filter type of meter for Range 1 to EMI.

:SENSe:FSCan:SCAN1:BANDwidth:SHAPE EMI

The following query returns EMI.

:SENSe:FSCan:SCAN1:BANDwidth:SHAPE?

[[:SENSe]:FSCan:SCAN<n>:POWER:GAIN[:STATe]**Syntax**

[[:SENSe]:FSCan:SCAN<n>:POWER:GAIN[:STATe] <bool>

[[:SENSe]:FSCan:SCAN<n>:POWER:GAIN[:STATe]?

Description

Enable or disable the preamplifier for the specified range.

Queries the status of the preamplifier for the specified range.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3 4 5 6 7 8 9 10	3 4 5
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables the preamplifier for Range 1.

:SENSe:FSCan:SCAN1:POWer:GAIN:STATe 1 or :SENSe:FSCan:SCAN1:POWer:GAIN:STATe ON

The following query returns 1.

:SENSe:FSCan:SCAN1:POWer:GAIN:STATe?

[[:SENSe]:FSCan:SCAN:ABORT

Syntax

[[:SENSe]:FSCan:SCAN:ABORT

Description

Aborts the scan sequence.

Example

The following command aborts the scan sequence.

:SENSe:FSCan:SCAN:ABORT

[[:SENSe]:FSCan:SEQuence

Syntax

[[:SENSe]:FSCan:SEQuence <enum>

[[:SENSe]:FSCan:SEQuence?

Description

Sets the type of scan sequence.

Queries the type of scan sequence.

Parameter

Name	Type	Range	Default
<enum>	Discrete	SCAN SEARch SSAMeasure SASearch SAMeasure REMeasure	SCAN

Remarks

SCAN: Scan only.

SEARch: Search only.

SSAMeasure: Scan, search, and measurement.

SASearch: Scan and search.

SAMeasure: Search and measurement.

REMeasure: Re(measure).

Return Format

The query returns SCAN, SEAR, SSAM, SAS, SAM, or REM.

Example

The following command sets the type of scan sequence to Scan Only.

:SENSe:FSCan:SEQuence SCAN

The following query returns SCAN.

:SENSe:FSCan:SEQuence?

[:SENSe]:FSCan:SEQuence:REMeasure

Syntax

```
[:SENSe]:FSCan:SEQuence:REMeasure <enum>
[:SENSe]:FSCan:SEQuence:REMeasure?
```

Description

Sets the re-measurement type.

Queries the re-measurement type.

Parameter

Name	Type	Range	Default
<enum>	Discrete	CURRent MARKed ALL	CURRent

Remarks

CURRent: current signal.

MARKed: marked signal.

ALL: All signals.

Return Format

The query returns CURR, MARK, or ALL.

Example

The following command sets the re-measurement type to Current signal.

```
:SENSe:FSCan:SEQuence:REMeasure CURRent
```

The following query returns CURR.

```
:SENSe:FSCan:SEQuence:REMeasure?
```

[:SENSe]:FSCan:FINal:DETEctor<n>

Syntax

```
[:SENSe]:FSCan:FINal:DETEctor<n> <type>
[:SENSe]:FSCan:FINal:DETEctor<n>?
```

Description

Sets the detector type for the selected detector in the final measurement.

Queries the detector type for the selected detector in the final measurement.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1
<type>	Discrete	AVERage NEGative POSitive QPEak EAverage RAverage OFF	Refer to "Remarks"

Remarks

AVERage: indicates the voltage average.

NEGative: indicates the negative peak.

POSitive: indicates the positive peak.

QPEak: indicates the quasi-peak.

EAverage: indicates EMI average.

RAverage: indicates the RMS average.

OFF: disables the detector.

By default, the detector type for Det1 is positive peak; the detector type for Det2 is quasi peak; the detector type for Det3 is EMI average.

Return Format

The query returns AVER, NEG, POS, QPE, EAV, RAV, or OFF.

Example

The following command sets the detector type for Det1 in the final measurement to Positive Peak.
:SENSe:FSCan:FINal:DETEctor1 POSitive

The following query returns POS.

:SENSe:FSCan:FINal:DETEctor1?

[[:SENSe]:FSCan:FINal:DETEctor<n>:DWELI**Syntax**

[[:SENSe]:FSCan:FINal:DETEctor<n>:DWELI <dwel Time>

[[:SENSe]:FSCan:FINal:DETEctor<n>:DWELI?

Description

Sets the dwell time for the selected detector in the final measurement.

Queries the dwell time for the selected detector in the final measurement.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1
<dwel Time>	Real	Refer to "Remarks"	Refer to "Remarks"

Remarks

The default dwell time for Det1 is 200 ms; the default dwell time for Det2 is 1 s; default dwell time for Det3 is 1 s.

The max. dwell time is 60 s, and the min. value is related to the selected detector type.

If Quasi-Peak detector type is selected, the min. dwell time is 0.5 ms. If RMS Average detector type is selected, the min. dwell time is 0.1 ms. If Pos Peak or Neg Peak detector type is selected, the min. dwell time is determined by the min. RBW value for the currently enabled range in the signal list.

RBW	Min. Dwell Time
100 Hz ≤ RBW < 200 Hz	1 ms
200 Hz < RBW < 1 kHz	100 μs
1 kHz ≤ RBW < 100 kHz	100 μs
RBW ≥ 100 kHz	50 μs

Return Format

The query returns the dwell time in scientific notation. The unit is s.

Example

The following command sets the dwell time for Det1 in the final measurement to 0.1 s.

:SENSe:FSCan:FINal:DETEctor1:DWELI 0.1

The following query returns 1.000000000e-01.

:SENSe:FSCan:FINal:DETEctor1:DWELI?

[[:SENSe]:FSCan:FINal:DETEctor<n>:LDELta**Syntax**

[[:SENSe]:FSCan:FINal:DETEctor<n>:LDELta <limit_Num>
 [[:SENSe]:FSCan:FINal:DETEctor<n>:LDELta?

Description

Sets Limit for Delta for the selected detector in the final measurement.

Queries Limit for Delta for the selected detector in the final measurement.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1
<limit_Num>	Discrete	1 2 3 4 5 6	1

Return Format

The query returns Limit for Delta for the selected detector.

Example

The following command sets Limit Line2 as Limit for Delta for the selected detector in final measurement.

:SENSe:FSCan:FINal:DETEctor1:LDELta 2

The following query returns 2.

:SENSe:FSCan:FINal:DETEctor1:LDELta?

[[:SENSe]:FSCan:DETEctor:TRACe<n>

Syntax

[[:SENSe]:FSCan:DETEctor:TRACe<n> <enum>

[[:SENSe]:FSCan:DETEctor:TRACe<n>?

Description

Sets the detector type for the specified trace.

Queries the detector type for the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1
<enum>	Discrete	AVERage NEGative POSitive EAVerage QPEak RAVerage	POSitive

Remarks

AVERage: indicates the voltage average.

NEGative: indicates the negative peak.

POSitive: indicates the positive peak.

EAVerage: indicates EMI average.

QPEak: indicates the quasi-peak.

RAVerage: indicates the RMS average.

Return Format

The query returns AVER, NEG, POS, EAV, QPE, or RAV.

Example

The following command sets the detector type of Trace 1 to Positive.

:SENSe:FSCan:DETEctor:TRACe1 POSitive

The following query returns POS.

:SENSe:FSCan:DETEctor:TRACe1?

[[:SENSe]:FSCan:DETEctor:TRACe<n>:AUTO

Syntax

[[:SENSe]:FSCan:DETEctor:TRACe<n>:AUTO <bool>

[[:SENSe]:FSCan:DETEctor:TRACe<n>:AUTO?

Description

Enables or disables the Detector Auto state for the specified trace.

Queries the Detector Auto state for the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	1
<bool>	Bool	OFF ON 0 1	ON 1

Return Format

The query returns 0 or 1.

Example

The following command enables the Detector Auto state for Trace 1.

:SENSe:FSCan:DETEctor:TRACe1:AUTO ON or :SENSe:DETEctor:TRACe1:AUTO 1

The following query returns 1.

:SENSe:FSCan:DETEctor:TRACe1:AUTO?

[[:SENSe]:METer:DETEctor:DWELI

Syntax

[[:SENSe]:METer:DETEctor:DWELI <time>

[[:SENSe]:METer:DETEctor:DWELI?

Description

Sets the dwell time of the meter detector.

Queries the dwell time of the meter detector.

Parameter

Name	Type	Range	Default
<time>	Real	10 ms to 100 s	10 ms

Return Format

The query returns the dwell time in scientific notation. The unit is s.

Example

The following command sets the dwell time for the meter detector to 0.1 s.

:SENSe:METer:DETEctor:DWELI 0.1

The following query 1.000000000e-01.

:SENSe:METer:DETEctor:DWELI?

[[:SENSe]:METer:PHOLd:TYPE

Syntax

[[:SENSe]:METer:PHOLd:TYPE <enum>

[[:SENSe]:METer:PHOLd:TYPE?

Description

Sets the peak hold type for the meter.

Queries the peak hold type for the meter.

Parameter

Name	Type	Range	Default
<enum>	Discrete	INFinite ADJustable	INFinite

Remarks

INFinite: infinite type. The peak hold line of the selected meter will not be reset.

ADJustable: adjustable type. The peak hold line of the selected meter will be reset to the current signal value after reaching the set peak hold time.

Return Format

The query returns INF or ADJ.

Example

The following command sets to the peak hold type for the meter to INFinite.

```
:SENSe:METer:PHOLd:TYPE INFinite
```

The following query returns INF.

```
:SENSe:METer:PHOLd:TYPE?
```

[[:SENSe]:METer:PHOLd:ADJustable]**Syntax**

```
[[:SENSe]:METer:PHOLd:ADJustable <time>
```

```
[[:SENSe]:METer:PHOLd:ADJustable?
```

Description

Sets the adjustable time for the Adjustable peak hold type..

Queries the adjustable time for the Adjustable peak hold type.

Parameter

Name	Type	Range	Default
<time>	Real	500 ms to 100 s	2 s

Return Format

The query returns the adjustable time for the Adjustable peak hold type in scientific notation.

Example

The following command sets the adjustable time for the Adjustable peak hold type to 0.8 s.

```
:SENSe:METer:PHOLd:ADJustable 0.8
```

The following query 8.000000000e-01.

```
:SENSe:METer:PHOLd:ADJustable?
```

[[:SENSe]:METer:PHOLd:RESet]**Syntax**

```
[[:SENSe]:METer:PHOLd:RESet
```

Description

Resets the peak hold lines of all the currently enabled meters to the current signal value.

[[:SENSe]:METer:PHOLd:RESet:FREQuency

Syntax

[[:SENSe]:METer:PHOLd:RESet:FREQuency <bool>
[:SENSe]:METer:PHOLd:RESet:FREQuency?

Description

Enables or disables resetting peak hold on frequency change.
Queries whether to enable resetting peak hold on frequency change.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables resetting peak hold on frequency change.

:SENSe:METer:PHOLd:RESet:FREQuency ON or :SENSe:METer:PHOLd:RESet:FREQuency 1

The following query returns 1.

:SENSe:METer:PHOLd:RESet:FREQuency?

[[:SENSe]:SLISt:COUPle:METer

Syntax

[[:SENSe]:SLISt:COUPle:METer <bool>
[:SENSe]:SLISt:COUPle:METer?

Description

Enables or disables coupling between the meter and the signal list.
Queries the on/off status of coupling between the meter and the signal list.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

The following command enables coupling between the meter and the signal list.

:SENSe:SLISt:COUPle:METer ON or :SENSe:SLISt:COUPle:METer 1

The following query returns 1.

:SENSe:SLISt:COUPle:METer?

:SYSTem Commands

:SYSTem:BEEPer

Syntax

:SYSTem:BEEPer <bool>
:SYSTem:BEEPer?

Description

Enables or disables the beeper; queries the on/off status of the beeper.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

:SYSTem:BEEPer ON or :SYSTem:BEEPer 1 /*Enables the beeper.*/
:SYSTem:BEEPer? /*The query returns 1.*/*

:SYSTem:BRIGhtness

Syntax

:SYSTem:BRIGhtness <brightness>
:SYSTem:BRIGhtness?

Description

Sets or queries the screen brightness.

Parameter

Name	Type	Range	Default
<brightness>	Integer	0 to 100	80

Return Format

The query returns the screen brightness in integer.

Example

:SYSTem:BRIGhtness 50 /*Sets the screen brightness to 50%.*/
:SYSTem:BRIGhtness? /*The query returns 50.*/*

:SYSTem:LANGuage

Syntax

:SYSTem:LANGuage <enum>

Description

Sets or queries the system language of the instrument.

Parameter

Name	Type	Range	Default
<enum>	Discrete	SCHinese TCHinese KOREan JAPanese ENGLish GERMan PORTuguese POLish FRENch RUSSian SPAN THAI INDonesian	ENGLish

Remarks

SCHinese: Simplified Chinese.
 TCHinese: Traditional Chinese.
 KORean: Korean.
 JAPanese: Japanese.
 ENGLish: English.
 GERMan: German.
 PORTuguese: Portuguese.
 POLish: Polish.
 FRENch: French.
 RUSSian: Russian.
 SPAN: Spanish.
 THAI: Thai.
 INDonesian: Indonesian.

Return Format

The query returns SCH, TCH, KOR, JAP, ENGL, GERM, PORT, POL, FREN, RUSS, SPAN, THAI, or IND.

Example

:SYSTem:LANGuage ENGLish /*Sets the system language to ENGLish.*/
 :SYSTem:LANGuage? /*The query returns ENGL.*

:SYSTem:LOCKed**Syntax**

:SYSTem:LOCKed<bool>
 :SYSTem:LOCKed?

Description

Locks or unlocks the keypad.
 Queries whether the keypad is locked or not.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

:SYSTem:LOCKed 1 or :SYSTem:LOCKed ON /*Disables the touch screen operation.*/
 :SYSTem:LOCKed? /*The query returns 1.*

:SYSTem:OPTion:INSTall**Syntax**

:SYSTem:OPTion:INSTall <option info>@<license info>

Description

Installs and activates the specified option.

Parameter

Name	Type	Range	Default
<option info>	ASCII String	--	--
<license info>	ASCII String	--	--

Remarks

The parameter <option info> indicates the order number of the option. <license info> indicates the serial number of the option.

Example

The following command installs the option RSA800-EMI.

```
:SYSTem:OPTion:INSTal RSA800-EMI@
```

```
8AD12B8EBC5DF492D1D4289B7CBA5B6150BF6F5D752D645C36D74530B05F39B49C461B23A50D  
6C94A34E06782AC4380070B0D1A86BA84E02768391FFD70C2103
```

:SYSTem:OPTion:STATus?**Syntax**

```
:SYSTem:OPTion:STATus? <option name>
```

Description

Queries whether the specified option is activated.

Parameter

Name	Type	Range	Default
<option name>	Discrete	EMI ADM VSA AMK PNM	—

Return Format

The query returns 0 (not activated) or 1 (activated).

Example

The following command queries whether the EMI option is activated.

```
:SYSTem:OPTion:STATus? EMI
```

:SYSTem:OPTion:UNINstall**Syntax**

```
:SYSTem:OPTion:UNINstall
```

Description

Uninstalls all the official options.

:SYSTem:PON**Syntax**

```
:SYSTem:PON <power_on>
```

```
:SYSTem:PON?
```

Description

Sets or queries the setting type when the instrument is powered on.

Parameter

Name	Type	Range	Default
<power_on>	Discrete	DEFault LATest	DEFault

Remarks

DEFault: indicates preset settings, including factory mode and 6 user-defined settings.

LATest: last settings.

Return Format

The query returns DEF or LAT.

Example

```
:SYSTem:PON LAT /*Sets the instrument to recall last settings at next power-on.*/  
:SYSTem:PON? /*The query returns LAT.*/
```

:SYSTem:RESet**Syntax**

:SYSTem:RESet

Description

Restarts the instrument.

:SYSTem:PRESet**Syntax**

:SYSTem:PRESet

Description

Initializes the instrument.

:SYSTem:PSTatus**Syntax**

```
:SYSTem:PSTatus <status>  
:SYSTem:PSTatus?
```

Description

Sets or queries the front-panel power switch status.

Parameter

Name	Type	Range	Default
<status>	Discrete	DEFault OPEN	DEFault

Remarks

DEFault: switches off. OPEN: switches on.

Return Format

The query returns DEF or OPEN.

Example

```
:SYSTem:PSTatus OPEN /*Sets the power switch to be on.*/  
:SYSTem:PSTatus? /*The query returns OPEN.*/
```

:SYSTem:PWRD**Syntax**

:SYSTem:PWRD

Description

Powers off the instrument.

:SYSTem:DATE

Syntax

:SYSTem:DATE <year>,<month>,<day>
:SYSTem:DATE?

Description

Sets or queries the system date of the instrument.

Parameter

Name	Type	Range	Default
<year>	ASCII String	2000 to 2099	—
<month>	ASCII String	01 to 12	—
<day>	ASCII String	01 to 31	—

Return Format

The query returns the current system date in the format of "YYYY-MM-DD".

Example

:SYSTem:DATE 2017,11,16 /*Sets the system date of the instrument to Nov. 16th, 2017.*/
:SYSTem:DATE? /*The query returns 2017-11-16.*/*

:SYSTem:STIME

Syntax

:SYSTem:STIME <bool>
:SYSTem:STIME?

Description

Sets or queries whether to display the system time.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 0 or 1.

Example

:SYSTem:STIME 1 or :SYSTem:STIME ON /*Sets to display the system date.*/
:SYSTem:STIME? /*The query returns 1.*/*

:SYSTem:TIME

Syntax

:SYSTem:TIME <hour>,<minute>,<second>
:SYSTem:TIME?

Description

Sets or queries the system time of the instrument.

Parameter

Name	Type	Range	Default
<hour>	ASCII String	00 to 23	—

<minute>	ASCII String	00 to 59	—
<second>	ASCII String	00 to 59	—

Return Format

The query returns the current system time in the format of "HH:MM:SS".

Example

```
:SYSTem:TIME 15,10,30 /*Sets the system time of the instrument to 15:10:30.*/
:SYSTem:TIME? /*The query returns 15:10:30.*/
```

:SYSTem:VERSion?**Syntax**

```
:SYSTem:VERSion?
```

Description

Queries the version number of the SCPI used by the system.

:TRACe Commands**:TRACe:FSCan:SElect****Syntax**

```
:TRACe:FSCan:SElect <enum>
:TRACe:FSCan:SElect?
```

Description

Selects a trace.

Queries the selected trace.

Parameter

Name	Type	Range	Default
<enum>	Discrete	TRACe1 TRACe2 TRACe3	TRACe1

Return Format

The query returns TRACe1, TRACe2, or TRACe3.

Example

The following command selects Trace2.

```
:TRACe:FSCan:SElect TRACe2
```

The following query returns TRACe2.

```
:TRACe:FSCan:SElect?
```

:TRACe<n>:FSCan:TYPE**Syntax**

```
:TRACe<n>:FSCan:TYPE <enum>
:TRACe<n>:FSCan:TYPE?
```

Description

Sets the type of the specified trace.
Queries the type of the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<enum>	Discrete	WRITe AVERAge MAXHold MINHold	WRITe

Remarks

WRITe: indicates clear/write.

AVERAge: indicates average.

MAXHold: indicates the maximum hold.

MINHold: indicates the minimum hold.

Only Trace 1 is available in the view that includes Density.

In the view that includes Pvt, only Trace 1 is available and the trace type can only be set to "Clear Write".

Return Format

The query returns WRIT, AVER, MAXH, or MINH.

Example

The following command sets the type of Trace 1 to Max Hold.

```
:TRACe1:FSCan:TYPE MAXHold
```

The following query returns MAXH.

```
:TRACe1:FSCan:TYPE?
```

:TRACe<n>:FSCan:UPDate:STATe

Syntax

```
:TRACe<n>:FSCan:UPDate:STATe <bool>
```

```
:TRACe<n>:FSCan:UPDate:STATe?
```

Description

Enables or disables the update of the specified trace.

Queries the setting state for the update of the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<bool>	Bool	OFF ON 0 1	Refer to "Remarks"

Remarks

By default, Trace 1 is enabled (ON), and Trace 2 through Trace 3 are disabled (OFF).

Return Format

The query returns 1 or 0.

Example

The following command enables the update of Trace 1.

```
:TRACe1:FSCan:UPDate:STATe ON or :TRACe1:UPDate:STATe 1
```

The following query returns 1.

```
:TRACe1:FSCan:UPDate:STATe?
```

:TRACe<n>:FSCan:DISPlay[:STATe]

Syntax

:TRACe<n>:FSCan:DISPlay[:STATe] <bool>
:TRACe<n>:FSCan:DISPlay[:STATe]?

Description

Enables or disables the display of the specified trace.
Queries the setting state for the specified trace.

Parameter

Name	Type	Range	Default
<n>	Discrete	1 2 3	—
<bool>	Bool	OFF ON 0 1	Refer to "Remarks"

Remarks

By default, Trace 1 is enabled (ON), and Trace 2 through Trace 3 are disabled (OFF).

Return Format

The query returns 1 or 0.

Example

The following command enables the display of Trace 1.

:TRACe1:FSCan:DISPlay:STATe ON or :TRACe1:DISPlay:STATe 1

The following query returns 1.

:TRACe1:FSCan:DISPlay:STATe?

:TRIGger Commands

:TRIGger[:SEQuence]:SOURce

Syntax

:TRIGger[:SEQuence]:SOURce <enum>

:TRIGger[:SEQuence]:SOURce?

Description

Sets the trigger source.

Queries the trigger source.

Parameter

Name	Type	Range	Default
<enum>	Discrete	EXTernal1 IMMEDIATE	IMMEDIATE

Remarks

EXTernal1: indicates the external trigger.

IMMEDIATE: indicates the free-run trigger.

Return Format

The query returns EXT1 or IMM.

Example

The following command sets the trigger source to free-run trigger.

:TRIGger:SEQuence:SOURce IMMEDIATE

The following query returns IMM.

:TRIGger:SEQuence:SOURce?

:TRIGger[:SEQuence]:EXTernal1:SLOPe

Syntax

:TRIGger:SEQuence:EXTernal1:SLOPe <type>

:TRIGger:SEQuence:EXTernal1:SLOPe?

Description

Sets the trigger edge for the external trigger.

Queries the trigger edge for the external trigger.

Parameter

Name	Type	Range	Default
<type>	Discrete	POSitive NEGative	POSitive

Remarks

POSitive: indicates the rising edge.

NEGative: indicates the falling edge.

Return Format

The query returns POS or NEG.

Example

The following command sets the trigger edge of External Trigger to POSitive.

:TRIGger:SEQuence:EXTernal1:SLOPe POSitive

The following query returns POS.
:TRIGger:SEQuence:EXTernal1:SLOPe?

:TRIGger[:SEQuence]:EXTernal1:DELaY

Syntax

:TRIGger[:SEQuence]:EXTernal1:DELaY <time>
:TRIGger[:SEQuence]:EXTernal1:DELaY?

Description

Sets the delay time for the external trigger.
Queries the delay time for the external trigger.

Parameter

Name	Type	Range	Default
<time>	Real	0 us to 500 ms	1 us

Remarks

This command is only valid when the external trigger delay function is enabled.

Return Format

The query returns the delay time for the external trigger in scientific notation. The unit is s.

Example

The following command sets the delay time for External Trigger to 100 ms.
:TRIGger:SEQuence:EXTernal1:DELaY 0.1

The following query returns 1.000000000e-01.
:TRIGger:SEQuence:EXTernal1:DELaY?

:TRIGger[:SEQuence]:EXTernal1:DELaY:STATe

Syntax

:TRIGger[:SEQuence]:EXTernal1:DELaY:STATe <bool>
:TRIGger[:SEQuence]:EXTernal1:DELaY:STATe?

Description

Enables or disables the external trigger delay function.
Queries the setting state of the external trigger delay function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 1 or 0.

Example

The following command enables the delay state of External Trigger.
:TRIGger:SEQuence:EXTernal1:DELaY:STATe ON or :TRIGger:SEQuence:EXTernal1:DELaY:STATe 1

The following query returns 1.
:TRIGger:SEQuence:EXTernal1:DELaY:STATe?

:TRIGger[:SEQuence]:HOLDoff

Syntax

:TRIGger[:SEQuence]:HOLDoff <time>
:TRIGger[:SEQuence]:HOLDoff?

Description

Sets the trigger holdoff time.
Queries the trigger holdoff time.

Parameter

Name	Type	Range	Default
<time>	Real	100 us to 500 ms	100 ms

Remarks

This command is only valid when the trigger holdoff function is enabled.

Return Format

The query returns the trigger holdoff time in scientific notation. The unit is s.

Example

The following command sets the sync holdoff time to 100 ms.
:TRIGger:SEQuence:HOLDoff 0.1

The following query returns 1.000000000e-01.
:TRIGger:SEQuence:HOLDoff?

:TRIGger[:SEQuence]:HOLDoff:STATe

Syntax

:TRIGger[:SEQuence]:HOLDoff:STATe <bool>
:TRIGger[:SEQuence]:HOLDoff:STATe?

Description

Turns on or off the trigger holdoff function.
Queries the status of the trigger holdoff function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 1 or 0.

Example

The following command enables the trigger holdoff function.
:TRIGger:SEQuence:HOLDoff:STATe ON or :TRIGger:SEQuence:HOLDoff:STATe 1

The following query returns 1.
:TRIGger:SEQuence:HOLDoff:STATe?

:TRIGger[:SEQuence]:ATRigger

Syntax

:TRIGger[:SEQuence]:ATRigger <time>
 :TRIGger[:SEQuence]:ATRigger?

Description

Sets the time that the analyzer will wait for the trigger to be initiated automatically.
 Queries the time that the analyzer will wait for the trigger to be initiated automatically.

Parameter

Name	Type	Range	Default
<time>	Real	1 ms to 100 s	100 ms

Remarks

This command is only valid when the auto triggering function is enabled.

Return Format

The query returns the time value in scientific notation. The unit is s.

Example

The following command sets the time to 10 ms.
 :TRIGger:SEQuence:ATRigger 0.01

The following query returns 1.000000000e-02.
 :TRIGger:SEQuence:ATRigger?

:TRIGger[:SEQuence]:ATRigger:STATe

Syntax

:TRIGger[:SEQuence]:ATRigger:STATe <bool>
 :TRIGger[:SEQuence]:ATRigger:STATe?

Description

Enables or disables the auto trigger function.
 Queries the setting status of auto trigger function.

Parameter

Name	Type	Range	Default
<bool>	Bool	OFF ON 0 1	OFF 0

Return Format

The query returns 1 or 0.

Example

The following command enables the auto trigger function.
 :TRIGger:SEQuence:ATRigger:STATe ON or :TRIGger:SEQuence:ATRigger:STATe 1

The following query returns 1.
 :TRIGger:SEQuence:ATRigger:STATe?

:TRIGger[:SEQuence]:OUTPut

Syntax

:TRIGger:SEQuence:OUTPut <bool>
 :TRIGger:SEQuence:OUTPut?

Description

Sets the external trigger output state.

Queries the on/off status of external trigger output.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	1
<bool>	Bool	OFF ON 0 1	OFF 0

Remarks

The parameter <n> can be omitted.

Return Format

The query returns 0 or 1.

Example

The following command enables the output of external trigger.

:TRIGger:SEQuence:OUTPut 1 or :TRIGger:SEQuence:OUTPut ON

The following query returns 1.

:TRIGger:SEQuence:OUTPut?

:TRIGger[:SEQuence]:OUTPut:POLarity**Syntax**

:TRIGger:SEQuence:OUTPut:POLarity <type>

:TRIGger:SEQuence:OUTPut:POLarity?

Description

Set the external trigger output polarity.

Queries the external trigger output polarity.

Parameter

Name	Type	Range	Default
<n>	Discrete	1	1
<type>	Discrete	POSitive NEGative	POSitive

Remarks

POSitive: indicates positive polarity.

NEGative: indicates negative polarity.

The parameter <n> can be omitted.

Return Format

The query returns POS or NEG.

Example

The following command sets the output polarity of the external trigger to POSitive.

:TRIGger:SEQuence:OUTPut:POLarity POSitive

The following query returns POS.

:TRIGger:SEQuence:OUTPut:POLarity?

:TRIGger[:SEQuence]:PORT[:MODE]

Syntax

:TRIGger[:SEQuence]:PORT[:MODE] <type>
 :TRIGger[:SEQuence]:PORT[:MODE]?

Description

Sets the mode of the trigger port.

Queries the current mode of the trigger port.

Parameter

Name	Type	Range	Default
<type>	Discrete	IN OUT	IN

Remarks

- IN: The trigger port is used only for trigger input, and relevant trigger input configurations can be made. In this case, the Trigger Output is automatically switched to Off, and both Trigger Output and Trigger Output Polarity are grayed out and disabled.
- OUT: The trigger port is used only for trigger output, and relevant trigger output configurations can be made. In this case, the Trigger Source is automatically switched to Free Run, and the corresponding option is grayed out and disabled.

Return Format

The query returns IN or OUT.

Example

The following command sets the trigger port mode to OUT:

:TRIGger:SEQuence:PORT:MODE OUT

The following query returns OUT:

:TRIGger:SEQuence:PORT:MODE?

:UNIT Commands

:UNIT:POWer

Syntax

:UNIT:POWer <unit>
 :UNIT:POWer?

Description

Sets the unit of the Y axis.

Queries the unit of the Y axis.

Parameter

Name	Type	Range	Default
<unit>	Discrete	DBM DBMV DBUV V W A	Refer to "Remarks"

Remarks

The default log unit is dBμV.

The default linear unit is V.

Return Format

The query returns DBM, DBMV, DBUV, V, W, or A.

Example

The following command sets the amplitude unit to Watts.
:UNIT:POWer W

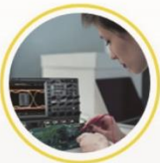
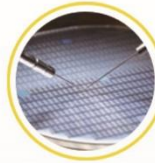
The following query returns W.
:UNIT:POWer?

Boost Smart World and Technology Innovation

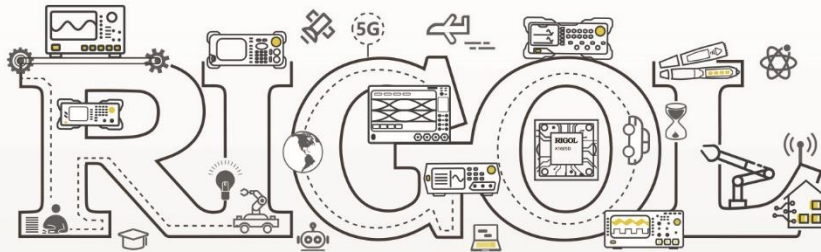
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HEADQUARTER

RIGOL TECHNOLOGIES CO., LTD.
No.8 Keling Road, New District,
Suzhou, Jiangsu, P.R.China
Tel: +86-400620002
Email: info-cn@rigol.com

JAPAN

RIGOL JAPAN CO., LTD.
5F, 3-45-6, Minamitsuka, Toshima-Ku,
Tokyo, 170-0005, Japan
Tel: +81-3-6262-8932
Fax: +81-3-6262-8933
Email: info.jp@rigol.com

EUROPE

RIGOL TECHNOLOGIES EU GmbH
Friedrichshafener Str. 5c
82205 Gilching
Germany
Tel: +49-(0)8105-27292-22
Email: johannes.kroiher@rigol.com

KOREA

RIGOL KOREA CO., LTD.
5F, 222, Gonghang-daero,
Gangseo-gu, Seoul, Republic of Korea
Tel: +82-2-6953-4466
Fax: +82-2-6953-4422
Email: info.kr@rigol.com

NORTH AMERICA

RIGOL TECHNOLOGIES, USA INC.
10220 SW Nimbus Ave.
Suite K-7
Portland, OR 97223
Tel: +1-877-4-RIGOL-1
Email: sales@rigol.com

For Assistance in Other Countries

Email: info.int@rigol.com

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