

:Config:Data:Fields

Set Fields to be Stored or Transmitted

Use this command to specify the fields to be included in the data string for each measurement. You can specify any set of fields, in any order. Each element in the list must be separated by an ampersand (&).

:Config:Data:Fields	<Read& Units& Chan& Chan_Tag& Rnum& Time& Date& Limits& Stat>
<Read>	Instrument reading. The resolution of this reading tracks the display resolution of the instrument. An overflow reading reads as +9.9e37 with no units.
<Units>	This element attaches the function unit to the reading.
<Chan>	Indicates channel number being measured.
<Chan_Tag>	User pre-selected name that is associated with a measurement point and set by :Config CHANS.
<Rnum>	Since invoking a scan or measure, the number of measurements made on that channel, in an integer format.
<Time>	The time a reading was taken, in the format hh:mm:ss.sss.
<Date>	The date a reading was taken, in the format mm/dd/yyyy.
<Limits>	The condition of the limits on a channel, if enabled. The format is Lim# Hi, Lo or In.
<Stat>	The status register content. Call for information/availability on upgrading for this new capability.

Query:

:Config:Data:Fields? Responds with a list of the fields to be stored and transmitted with each reading. Format of the response is identical to the format of the command shown above.

Example:

```
:Config:Data:Fields Read&Chan&Units&Time
```

:Config:DataMem:Mode **Set Action When Memory is Full**

Sets how the instrument responds to new scan data when memory is full.

:Config:DataMem:Mode <WrapWhenFull|StopWhenFull>

<WrapWhenFull> Causes old data to be overwritten when memory becomes full.

<StopWhenFull> Protects old data by terminating the scan.

Query:

:Config:DataMem:Mode? Responds with memory overflow mode. Format of the response is identical to the format of the command shown above.

:Config:DataMem:Scans? **Shows Number of Scans to be Stored in Memory**

Returns the number of scans that can be stored in memory, using the current scan_list.

:Config:Filter:Advanced **Set Analog Filter**

Configures advanced filtering. Call for information/availability on upgrading for this new capability.

:Config:Filter:Advanced <chan_list><Bessel|Butterworth>

:Config:Filter:Dig:MvgAvg **Set Digital Filter**

Set configuration of Moving Average Digital Filtering. To enable, use **:Filter:Dig on** <chan_list>

:Config:Filter:Dig:MvgAvg <chan_list> <#_of_meas>

<chan_list> Any valid channel for the specific instrument. For valid channels, see the SmartLink™ connection diagram in this manual. Specify in form of a comma separated list, or hyphenated range, or a combination.

COMMAND REFERENCE

<#_of_meas> Sets number of readings to be used in the moving average digital filter. The number of readings to average can be set from 1 to 50 measurements. Beginning with the first reading and until <#_of_meas> has been reached, only those readings taken will actually be averaged. This filtering is separate from the (non-moving) averaging done on each reading using the **:Config:Meas:Avg** command.

Query:

:Config:Filter:Dig:MvgAvg ? <chan_list> Responds with setting for the digital filter. Format of the response is identical to the format of the command shown above.

See also: **:Filter:Dig**, **:Config:Meas:Avg**

Example:

:config:Filter:Dig:MvgAvg 1,2,3-6 10

:Config:Limits

Set Limit Values per Channel

Store alarm limit information for the indicated channel and limit.

:Config:Limits <chan_list> <Lim1|Lim2> <Hi|Lo> <lim_value> <hysteresis>

<chan_list>	Any valid channel for the specific instrument. For valid channels, see the connection diagram in the specification section for your SmartLink™. Specify in form of a comma separated list, or hyphenated range, or a combination.
<Lim1 Lim2>	Specify either Lim1 or Lim2. One or two limits per channel can be set, one at a time.
<High Low>	Specify either a High or Low limit. Lim1 defaults to High , Lim2 defaults to Low .
<lim_value>	Specify limit value, using decimal or exponential format in the units being measured.
<hysteresis>	The deadband around the lim_value, inside of which an alarm will not be set.

Query:

:Config:Limits? <chan_list> <Lim1|Lim2> Responds with limits configuration data. Format of the response is identical to the format of the command shown above.

See also: :Limits

Example:

```
:config:limits 3 Lim1 High 5 .5
```

:Config:Limits:Assoc Set Digital Outputs Based on Limits

Sets a digital output when a limit is exceeded on a measurement channel.

Config:Limits:Assoc <digout_chan#> <chan_list> <Lim1|Lim2>

<digout_chan#> Specify the digital output channel(s) to be controlled by the limit. Valid channels are shown in the specifications for your SmartLink™.

<chan_list> Specify the channel to control the digital output.

<Lim1|Lim2> Specify the limit to be used to control the digital output.

Query:

:Config:Limits:Assoc? <digout_chan#> Responds with configuration of digital output linking to limits.

Format of the response is identical to the format of the command shown above. Call for information/availability on upgrading for this new capability.

Example:

```
:config:limits:assoc 17 3 Lim1
```

:Config:Meas:Average Select Measurement Rate

Indirectly specifies the measurement rate by telling the unit how many readings to average to create one measurement.

:Config:Meas:Average <#_rdgs_per_meas>