



TANGO
Device
Server

Agilent 33x20a signal generator User's Guide

Agilent33x20A Class

Revision: keyword substitution - Author: xavela
Implemented in C++ - CVS repository: tango-ds

Introduction:

This class implements the standard signal generator interface for the Agilent 33120a and 33220a signal generators.

Class Inheritance:

- Tango::DeviceImpl
 - SignalGenerator
 - Agilent33x20A

Properties:

Device Properties		
Property name	Property type	Description
GpibServer	Tango::DEV_STRING	name of gpib device proxy e.g. sr/d-tm/hp33120-gpib

Device Properties Default Values:

Property Name	Default Values
GpibServer	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	*
OFF	*
FAULT	

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Frequency: frequency	DEV_DOUBLE	READ_WRITE	No
Voltage	DEV_DOUBLE	READ_WRITE	No
VoltageOffset	DEV_DOUBLE	READ_WRITE	No
Function	DEV_STRING	READ_WRITE	No
SweepStartFrequency: start sweep frequency	DEV_DOUBLE	READ_WRITE	No
SweepStopFrequency: stop sweep frequency	DEV_DOUBLE	READ_WRITE	No
SweepSpacing: Allowed values : LIN for linear LOG for logarithmic	DEV_STRING	READ_WRITE	No
SweepTime	DEV_DOUBLE	READ_WRITE	No
TriggerSource	DEV_STRING	READ_WRITE	No
BurstCycles: number of burst cycles when in burst mode	DEV_LONG	READ_WRITE	No
BurstPhase: the start phase of the signal generated when in burst mode	DEV_DOUBLE	READ_WRITE	No
BurstRate: rate at which bursts will be generated when in burst mode	DEV_DOUBLE	READ_WRITE	No
Mode	DEV_STRING	READ_WRITE	No
ModulationSource	DEV_STRING	READ_WRITE	No
ModulationFrequency	DEV_DOUBLE	READ_WRITE	No
ModulationFunction	DEV_STRING	READ_WRITE	No
AMDepth	DEV_DOUBLE	READ_WRITE	No
FMDeviation	DEV_DOUBLE	READ_WRITE	No

Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	Argument In	Argument Out
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
Reset	DEV_VOID	DEV_VOID

1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection. After an Init command executed on a device, it is not necessary for client to re-connect to the device. This command first calls the device *delete_device()* method and then execute its *init_device()* method. For C++ device server, all the memory allocated in the *nit_device()* method must be freed in the *delete_device()* method.
The language device desctructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

2 - State

- **Description:** This command gets the device state (stored in its *device_state* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_STATE : State Code

- **Command allowed for:**

- Tango::ON
- Tango::OFF
- Tango::FAULT

3 - Status

- **Description:** This command gets the device status (stored in its *device_status* data member) and returns it to the caller.

- **Argin:**

DEV_VOID : none.

- **Argout:**

CONST_DEV_STRING : Status description

- **Command allowed for:**

- Tango::ON
- Tango::OFF
- Tango::FAULT

4 - On

- **Description:** Switch signal generation ON according to settings.

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

- Tango::ON
- Tango::OFF
- Tango::FAULT

5 - Off

- **Description:** Switch signal generation OFF.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

6 - Reset

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

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