



TANGO
Device
Server

Keithley 6220 current source device server User's Guide

Keithley6220 Class

Revision: - Author: michel_peru
Implemented in C++ - CVS repository: tango-ds

Introduction:

This device server is intended to control a Keithley 6620 precision current source over a serial line.

Class Inheritance:

- Tango::Device_4Impl
 - Keithley6220

Properties:

Device Properties		
Property name	Property type	Description
SerialDeviceName	Tango::DEV_STRING	The device name of the associated serial device server.
DefaultCompliance	Tango::DEV_DOUBLE	The default value for the compliance (expressed in V, set to 10V).
DefaultCurrentValue	Tango::DEV_DOUBLE	This is the default current value to be set (expressed in A, set to 100mA).
Out1DefaultState	Tango::DEV_BOOLEAN	Out1 state after startup.
Out2DefaultState	Tango::DEV_BOOLEAN	Out2 state after startup.
Out3DefaultState	Tango::DEV_BOOLEAN	Out3 state after startup.
Out4DefaultState	Tango::DEV_BOOLEAN	Out4 state after startup.

Device Properties Default Values:

Property Name	Default Values
SerialDeviceName	No default value
DefaultCompliance	10.0
DefaultCurrentValue	100.0e-03
Out1DefaultState	false
Out2DefaultState	false
Out3DefaultState	false
Out4DefaultState	false

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Current	DEV_DOUBLE	READ_WRITE	No
Compliance	DEV_DOUBLE	READ_WRITE	No
Output1	DEV_BOOLEAN	READ_WRITE	No
Output2	DEV_BOOLEAN	READ_WRITE	No
Output3	DEV_BOOLEAN	READ_WRITE	No
Output4	DEV_BOOLEAN	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
ToggleDebugFlag	DEV_VOID	DEV_VOID
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
DisplayString	DEV_STRING	DEV_VOID
UndisplayString	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:**

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:**

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:**

4 - ToggleDebugFlag

- **Description:** Enable/disable the display of debug informations.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - On

- **Description:** Turns the output ON.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

6 - Off

- **Description:** Turns the output OFF.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

7 - DisplayString

- **Description:** Makes the instrument displaying the string.
- **Argin:**
DEV_STRING :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

8 - UndisplayString

- **Description:** Makes the Keithley returning to normal display.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :

- **Command allowed for:**

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