



TANGO
Device
Server

Keithley428 Current Amplifier User's Guide

Keithley428 Class

Revision: - Author: tnunez
Implemented in C++

Introduction:

Class for controlling the Keithley428 current amplifier.

Class Identification:

- **Contact** : at mail.desy.de - tnunez
- **Class Family** : Instrumentation
- **Platform** : Unix Like
- **Bus** : GPIB
- **Manufacturer** : Keithley
- **Reference** : 428

Class Inheritance:

- Tango::Device_4Impl
 - Keithley428

Properties:

Device Properties		
Property name	Property type	Description
GpibDevice	Tango::DEV_STRING	Name of the gpib device connected to the hardware.

Device Properties Default Values:

Property Name	Default Values
GpibDevice	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	
FAULT	

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Gain: 0, 1, 2, 3 -> 10e3 V/A 4 -> 10e4 V/A 5 -> 10e5 V/A 6 -> 10e6 V/A 7 -> 10e7 V/A 8 -> 10e8 V/A 9 -> 10e9 V/A 10 -> 10e10 V/A 11 -> 10e11 V/A	DEV_LONG	READ_WRITE	No
GainStr	DEV_STRING	READ	No
Overloaded: 1 if device is overloaded	DEV_LONG	READ	No
Bypass: 0 -> zero check off, 1 -> zero check on, 2 (only read) zero correction last selected.	DEV_LONG	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
PerformZeroCorrect	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 destructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**
 - Tango::ON
 - 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::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::FAULT

4 - PerformZeroCorrect

- **Description:** Perform Zero correction.

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

- Tango::ON
- Tango::FAULT

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