









TANGO Device Server

# TANGO Device Server User's Guide

# **PyDsSerial Class**

Revision: - Author: emichelin Implemented in Python

## **Introduction:**

## **Class Inheritance:**

PyTango.Device\_4ImplPyDsSerial

# **Properties:**

There is no Class properties. There is no Device Properties.

# **Attributes:**

Scalar Attributes				
Attribute name	Data Type	R/W Type	Expert	
LastResponse: The motor base_rate	DEV_STRING	READ	No	
Function: Measurement function	DEV_STRING	READ_WRITE	No	
Range: Range Value	DEV_SHORT	READ_WRITE	No	
Rate: Speed Value	DEV_STRING	READ_WRITE	No	
Trigger: Trigger Type	DEV_SHORT	READ_WRITE	No	
PrimaryValue: Primary Value send by the multimeter	DEV_STRING	READ	No	
Mode: AUTO or FIXED	DEV_STRING	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	
Open	DEV_VOID	DEV_STRING	
Close	DEV_VOID	DEV_STRING	
StatusDevice	DEV_VOID	DEV_STRING	
WriteRead	DEV_STRING	DEV_STRING	
DeleteDevice	DEV_VOID	DEV_VOID	
SetFunction	DEV_STRING	DEV_VOID	
SetRange	DEV_SHORT	DEV_VOID	
SetRate	DEV_STRING	DEV_VOID	
SetTrigger	DEV_SHORT	DEV_VOID	
SetMode	DEV_STRING	DEV_VOID	
Reset	DEV_VOID	DEV_VOID	
Measure	DEV_VOID	DEV_VOID	
PrimaryValue	DEV_VOID	DEV_STRING	

#### 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 - Open

- **Description:** Open Command
- Argin:

 $DEV_VOID:$ 

• Argout:

**DEV\_STRING**: The Port number

• Command allowed for:

## 5 - Close

- **Description:** Close serial line
- Argin:

 $DEV_VOID:$ 

• Argout:

**DEV\_STRING**: The Port number

• Command allowed for:

#### 6 - StatusDevice

- **Description:** Gives the Status of the Device Server
- Argin:

**DEV\_VOID**:

• Argout:

**DEV\_STRING**: Status of the device

• Command allowed for:

## 7 - WriteRead

- Description: Write and read commands of the multimeter
- Argin:

**DEV\_STRING**: Command to write on the port

• Argout:

**DEV\_STRING**: Response of the device

• Command allowed for:

#### 8 - DeleteDevice

- **Description:** Delete the Device Server from the Database
- Argin:

**DEV\_VOID**:

• Argout:

 $DEV_VOID:$ 

• Command allowed for:

## 9 - SetFunction

- **Description:** Write and read commands of the multimeter
- Argin:

**DEV\_STRING**: Measurement Function

• Argout: DEV\_VOID:

• Command allowed for:

## 10 - SetRange

- **Description:** Define a Range for a Measure
- Argin:

**DEV\_SHORT**: Range

- Argout: DEV\_VOID:
- Command allowed for:

#### 11 - SetRate

- **Description:** Define a Rate for a Measure
- Argin:

**DEV\_STRING**: Rate

• Argout: DEV\_VOID:

• Command allowed for:

# 12 - SetTrigger

- **Description:** Define a Trigger for a Measure
- Argin:

**DEV\_SHORT**: Trigger

• Argout: DEV\_VOID:

• Command allowed for:

#### 13 - SetMode

• **Description:** Define a Mode for a Measure

• Argin:

**DEV\_STRING**: Mode

• Argout:

**DEV\_VOID**:

• Command allowed for:

#### 14 - Reset

- **Description:** Restoration of power multimeter
- Argin:

**DEV\_VOID**:

• Argout:

 ${\bf DEV\_VOID}:$ 

• Command allowed for:

#### 15 - Measure

- **Description:** Performs a measure
- Argin:

DEV\_VOID:

• Argout:

DEV\_VOID:

• Command allowed for:

## 16 - Primary Value

- **Description:** Gives the value obtained by the multimeter (Primary Screen)
- Argin:

**DEV\_VOID**:

• Argout:

**DEV\_STRING**: Value send by the Multimeter

• Command allowed for:

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