



TANGO
Device
Server

Energy Spread User's Guide

EnergySpread Class

Revision: - Author: vedder
Implemented in C++ - CVS repository: ESRF

Introduction:

This device server calculate the beam energy spread.

Class Inheritance:

- Tango::Device_4Impl
 - EnergySpread

Properties:

Device Properties		
Property name	Property type	Description
SigmaXSourceD9	Tango::DEV_STRING	The device name where we will read the SigmaXSource attribute.
SigmaXSourceID25	Tango::DEV_STRING	The device name where we will read the SigmaXSource attribute.

Device Properties Default Values:

Property Name	Default Values
SigmaXSourceD9	No default value
SigmaXSourceID25	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
EnergySpread	DEV_DOUBLE	READ	No
CombinedEmittance	DEV_DOUBLE	READ	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
Variable: This is a string list of the variables used into the calculation, and their associated values.	DEV_STRING	64	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
ReloadFreeProperties	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::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 - ReloadFreeProperties

- **Description:** This method reloads the d9 and id25 free properties used in the energy spread calculation.

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

- Tango::ON
- Tango::FAULT

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