

CornerStone130 Tango Cpp Class

Contents :

- [Description](#)
- [Properties](#)
- [Commands](#)
 - [State](#)
 - [Status](#)
 - [Abort](#)
- [Attributes](#)
 - [gratingNumber](#)
 - [gratingLabel](#)
 - [gratingMinWL](#)
 - [gratingMaxWL](#)
 - [filterNumber](#)
 - [filterLabel](#)
 - [wavelength](#)
 - [shutterClosed](#)
- [States](#)

CornerStone130 Class Identification :

Contact : at nexeya.com - jacques.gouno
Class Family : Miscellaneous(specific Specific)
Platform : All Platforms
Bus : Not Applicable
Manufacturer : none
Manufacturer ref. :

CornerStone130 Class Inheritance :

- [Tango::DeviceImpl](#)
 - CornerStone130

CornerStone130 Class Description :

This class is to interface the CornerStone130 equipment on TANGO

CornerStone130 Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
Gratings	List of {grating id : grating label : min wavelength : max wavelength}	String[]	none
Filters	List of {filter id : filter label}	String[]	none
OperationalUnit	Operational unit, among: nm, um, wm.	String	nm
GpibDeviceUrl	GPIB device name.	String	none
PollingPeriod	Polling period, in ms.	double	1000
ReadDelay	Read command delay, in ms. For expert only.	double	100
FilterWriteDelay	Filter write delay, in ms.	double	10000.0
GratingWriteDelay	Grating write delay, in ms.	double	10000.0
WaveLengthWriteDelay	Wavelength write delay, in ms.	double	10000.0

CornerStone130 Class Commands				
Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
Abort	DEV_VOID	DEV_VOID	OPERATOR	Stops monochromator.

Command State :

This command gets the device state (stored in its *device_state* data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none.

Output Argument	Tango::DEV_STATE	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Status :

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

Status Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Abort :

Stops monochromator.

Abort Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..

Command allowed for	All states	..
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CornerStone130 Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
gratingNumber	false	false	Scalar	READ_WRITE	Tango::DEV_USHORT	OPERATOR	Current grating number
gratingLabel	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	Current grating label.
gratingMinWL	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Minimum wave length for current grating, in operational unit.
gratingMaxWL	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Maximum wave length for current grating, in operational unit.
filterNumber	false	false	Scalar	READ_WRITE	Tango::DEV_USHORT	OPERATOR	Current filter number.
filterLabel	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	Current filter label
wavelength	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Current wave length value, in operational unit.
shutterClosed	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	Current shutter state.

There is no dynamic attribute defined.

Attribute gratingNumber :

Current grating number

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	gratingNumber
unit	
standard unit	
display unit	
format	
max_value	2
min_value	1
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute gratingLabel :

Current grating label.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ

Attribute Properties	
label	gratingLabel
unit	

Attribute Event Criteria	
Periodic	Not set
	Not

Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Relative Change	set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute gratingMinWL :

Minimum wave length for current grating, in operational unit.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	gratingMinWL
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false

Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute gratingMaxWL :

Maximum wave length for current grating, in operational unit.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	gratingMaxWL
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute filterNumber :

Current filter number.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	filterNumber
unit	
standard unit	
display unit	
format	
max_value	6
min_value	1
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute filterLabel :

Current filter label

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
Display	OPERATOR

Attribute Properties	
label	filterLabel
unit	
standard unit	
display unit	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set

Level	
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute wavelength :

Current wave length value, in operational unit.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	wavelength
unit	
standard unit	
display unit	
format	
max_value	
min_value	0
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false

Push DataReady event by user code	Not set
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Attribute shutterClosed :

Current shutter state.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_BOOLEAN
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	shutterClosed
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Name	Description
INIT	Initialization in progress...
STANDBY	Device is up and ready.
MOVING	Monochromator central wavelength is moving.
FAULT	Fatal error occurred.