

SY2527Crate Tango Cpp Class

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SY2527Crate Class Identification :

Contact : at null - null
Class Family :
Platform :
Bus :
Manufacturer :
Manufacturer ref. :

SY2527Crate Class Inheritance :

- [Tango::DeviceImpl](#)
 - SY2527Crate

SY2527Crate Class Description :

This device controls the high voltage power supply boards fixed in the SY2527 crate.
the hardware is manufactured by the "CAEN" company.
The used communication protocol is TCP/IP.
On device can be seen as 1 HV power supply (PS) system consisted of several PS boards.
Each Board is consisted of 12 Channels (PS board types : A1733; A1833A)

SY2527Crate Properties :

There is no class properties

| Device Properties | | | |
|---------------------|---|----------|---------------|
| Name | Description | Type | Default Value |
| Host | SY2527 IP adress | String | none |
| HvPowerSupplyName | an HV power supply name is consisted of severals boards, each one locked in different slots | String | none |
| SlotList | this list contains the used slots in the HV Power Supply | short[] | none |
| DefaultVoltagesList | each element of the list is a default voltage configuration. One configuration is consists of 3 fields according to the following pattern: SlotNumer; ChannelNumber;DefaultValue; don`t forget the ` ; ` character at the end of string | String[] | none |
| RampVoltage | ramp up & down voltagaes are specified by assigning this property | double | none |

| SY2527Crate 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. |
| GetVoltageOnChannel | DEVVAR_USHORTARRAY | DEV_DOUBLE | OPERATOR | None. |
| GetMeasVoltageOnChannel | DEVVAR_USHORTARRAY | DEV_DOUBLE | OPERATOR | None. |
| | | | | |

| | | | | |
|--|--------------------|------------|----------|---|
| SetVoltageOnChannel | DEVVAR_DOUBLEARRAY | DEV_VOID | OPERATOR | None. |
| SetVoltageOnAllChannels | DEV_DOUBLE | DEV_VOID | OPERATOR | None. |
| PowerOnOverAllChannels | DEV_VOID | DEV_VOID | OPERATOR | None. |
| PowerOffOverAllChannels | DEV_VOID | DEV_VOID | OPERATOR | None. |
| PowerOnChannel | DEVVAR_USHORTARRAY | DEV_VOID | OPERATOR | None. |
| PowerOffChannel | DEVVAR_USHORTARRAY | DEV_VOID | OPERATOR | None. |
| GetChannelStatus | DEVVAR_USHORTARRAY | DEV_USHORT | OPERATOR | None. |
| SetDefaultVoltageOnAllChannels | DEV_VOID | DEV_VOID | OPERATOR | set Default Voltage On All Channels defined in properties |

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 GetVoltageOnChannel :

| GetVoltageOnChannel Definition | | |
|---------------------------------------|---------------------------|---|
| Input Argument | Tango::DEVVAR_USHORTARRAY | arg1 : slot number, arg2 : channel number |
| Output Argument | Tango::DEV_DOUBLE | preset voltage |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command GetMeasVoltageOnChannel :

| GetMeasVoltageOnChannel Definition | | |
|---|---------------------------|---|
| Input Argument | Tango::DEVVAR_USHORTARRAY | arg1 : slot number, arg2 : channel number |
| Output Argument | Tango::DEV_DOUBLE | measure voltage |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command SetVoltageOnChannel :

| SetVoltageOnChannel Definition | | |
|---------------------------------------|---------------------------|---|
| Input Argument | Tango::DEVVAR_DOUBLEARRAY | arg1 : slot number, arg2 : channel number, arg3: preset voltage |
| Output Argument | Tango::DEV_VOID | nothing |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command SetVoltageOnAllChannels :

| SetVoltageOnAllChannels Definition | | |
|---|-------------------|---|
| Input Argument | Tango::DEV_DOUBLE | preset voltage to apply on all channels |
| Output Argument | Tango::DEV_VOID | nothing |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command PowerOnOverAllChannels :

| PowerOnOverAllChannels 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 | .. |

Command PowerOffOverAllChannels :

| PowerOffOverAllChannels 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 | .. |

Command PowerOnChannel :

| PowerOnChannel Definition | | |
|----------------------------------|---------------------------|---|
| Input Argument | Tango::DEVVAR_USHORTARRAY | arg 1: slot number, arg 2: channel number |
| Output Argument | Tango::DEV_VOID | nothing |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command PowerOffChannel :

| PowerOffChannel Definition | | |
|-----------------------------------|---------------------------|--|
| Input Argument | Tango::DEVVAR_USHORTARRAY | arg 1 : slot number, arg 2: channel number |
| Output Argument | Tango::DEV_VOID | nothing |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command GetChannelStatus :

| GetChannelStatus Definition | | |
|------------------------------------|---------------------------|---|
| Input Argument | Tango::DEVVAR_USHORTARRAY | arg1 : slot number, arg2 : channel number |
| Output Argument | Tango::DEV_USHORT | status byte |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

Command SetDefaultVoltageOnAllChannels :

set Default Voltage On All Channels defined in properties

| SetDefaultVoltageOnAllChannels Definition | | |
|--|-----------------|---------|
| Input Argument | Tango::DEV_VOID | nothing |
| Output Argument | Tango::DEV_VOID | nothing |
| DisplayLevel | OPERATOR | .. |
| Inherited | false | .. |
| Abstract | false | .. |
| Polling Period | Not polled | .. |
| | | |
| Command allowed for | All states | .. |

There is no attribute defined.

There is no dynamic attribute defined.

There is no state defined