

LKS336SensorInput Tango Cpp Class

Contents :

- [Description](#)
- [Properties](#)
- [Commands](#)
 - [State](#)
 - [Status](#)
- [Attributes](#)
 - [Temperature](#)
 - [SensorType](#)
 - [SensorTypeInfo](#)
 - [InputCurve](#)
 - [Tlimit](#)
 - [Units](#)
 - [CurvesInfo](#)
- [States](#)

LKS336SensorInput Class Identification :

Contact : at mail.desy.de - tnunez
Class Family : Instrumentation
Platform : Unix Like
Bus : GPIB
Manufacturer : Lake Shore Cryotronics
Manufacturer ref. : Model 336 Temperature Controller

LKS336SensorInput Class Inheritance :

- [Tango::DeviceImpl](#)
 - LKS336SensorInput

LKS336SensorInput Class Description :

Sensor input of the LKS336 Temperature Controller

LKS336SensorInput Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
GpibDeviceName	Gpib device connecting to the hardware	String	none
Channel	Name of the sensor input (A,B,C or D)	String	none

LKS336SensorInput Class Commands				
Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its device_state data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its device_status data member) and returns it to the caller.

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	Device state
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
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	Device status
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

LKS336SensorInput Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
Temperature	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Temperature in K or C (depending on the Units attribute)
SensorType	false	false	Scalar	READ	Tango::DEV_LONG	OPERATOR	Sensor Type: 0->disabled,1->Diode,2->Platinum RTD,3->NTC RTD,4->Thermocouple
SensorTypeInfo	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	
InputCurve	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	Input Curve
Tlimit	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	A temperature limit in Kelvin above which all control outputs will be shutdown. 0-> turns this feature off.
Units	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	Read/writes preferred units parameter for sensor readings and for the control setpoint: 1 = kelvin, 2 = Celsius, 3 = Sensor
							Information about curves

CurvesInfo	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	and the allowed sensor types and temperature ranges.
----------------------------	-------	-------	----------	------	-------------------	----------	--

There is no dynamic attribute defined.

Attribute Temperature :

Temperature in K or C (depending on the Units attribute)

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	
unit	(Units attribute)
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	false

Attribute SensorType :

Sensor Type: 0->disabled,1->Diode,2->Platinum RTD,3->NTC RTD,4->Thermocouple

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

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	4
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	false

Attribute SensorTypeInfo :

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

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	

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

min_warning	
delta_time	
delta_val	

Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

Attribute InputCurve :

Input Curve

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
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	
unit	
standard unit	
display unit	
format	
max_value	60
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	false

Attribute Tlimit :

A temperature limit in Kelvin above which all control outputs will be shutdown.
 0-> turns this feature off.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
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	
unit	K
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	false

Attribute Units :

Read/writes preferred units parameter for sensor readings and for the control setpoint: 1 = kelvin, 2 = Celsius, 3 = Sensor

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false

Attribute Properties	
label	
unit	1->K, 2->C,3->Sensor
standard unit	
display unit	
format	

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

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

max_value	3
min_value	1
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Archive Periodic	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	false

Attribute CurvesInfo :

Information about curves and the allowed sensor types and temperature ranges.

Attribute Definition	
Attribute Type	Spectrum (60)
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
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	false

LKS336SensorInput Class States

Name	Description
ON	
FAULT	