

## IBeamSmart Tango Cpp Class

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### **IBeamSmart Class Identification :**

Contact : at desy.de - johannes.blume  
Class Family : Miscellaneous  
Platform : All Platforms  
Bus : Serial Line  
Manufacturer : <http://www.toptica.com/>  
Manufacturer : <http://www.toptica.com/products/single-mode-diode-ref-lasers/ibeam-smart/>

### **IBeamSmart Class Inheritance :**

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

### **IBeamSmart Class Description :**

Tango device server for toptica iBeamSmart laser

### **IBeamSmart Properties :**

## There is no class properties

Device Properties			
Name	Description	Type	Default Value
DeviceFile	Name of serial device file	String	none
BaudRate	baud rate of device	int	115200
DynAttrList	for internal use only	String[]	none

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IBeamSmart Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its device_state data member) and returns it to the caller.
<a href="#">Status</a>	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.
<a href="#">InitDAC</a>	DEV_VOID	DEV_VOID	OPERATOR	Initialize DAC and EPOT hardware from RAM table
<a href="#">InitLaser</a>	DEV_VOID	DEV_VOID	OPERATOR	Initialize laser

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## 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	..

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### **Command Status :**

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

<b>Status Definition</b>		
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	..

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### **Command InitDAC :**

Initialize DAC and EPOT hardware from RAM table

<b>InitDAC Definition</b>		
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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### **Command InitLaser :**

Initialize laser

InitLaser 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	..

IBeamSmart Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
<a href="#">DeviceID</a>	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	The device id / serial number

IBeamSmart Class Dynamic Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
<a href="#">BoolDynAttr</a>	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
<a href="#">DoubleDynAttr</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	

### **Attribute DeviceID :**

The device id / serial number



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	
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

**Dynamic attribute BoolDynAttr :**

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

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

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

Read allowed for	All states
Write allowed for	All states

max_warning	
min_warning	
delta_time	
delta_val	

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

**Dynamic attribute DoubleDynAttr :**

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	
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

<b>IBeamSmart Class States</b>	
<b>Name</b>	<b>Description</b>
ON	Everything ok
FAULT	Something went wrong, check status