



**TANGO**  
Device  
Server

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# **Danfysik 8100 power supply channel DS. User's Guide**

## **Dan8100Ch Class**

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**Revision: Release\_2\_1 - Author: peru**  
**Implemented in C++ - CVS repository: ESRF**

### **Introduction:**

Control of TL1 power supplies.

### **Class Inheritance:**

- Tango::Device\_4Impl
  - Dan8100Ch

### **Class Description:**

This device server is intended to drive one channel of a Danfysik 8000 powersupply.

## Properties:

<b>Device Properties</b>		
<b>Property name</b>	<b>Property type</b>	<b>Description</b>
<b>ChannelName</b>	Tango::DEV_STRING	Name of the channel (ex: \"QF1\", \"QD2\",...).
<b>SocketDevName</b>	Tango::DEV_STRING	Device name of the Socket DS. The socket is the way to access the hardware.
<b>CurrentIsPositive</b>	Tango::DEV_BOOLEAN	Used to enable the return of a positive or of a negative current depending on the type of quadripole.

## Device Properties Default Values:

<b>Property Name</b>	<b>Default Values</b>
ChannelName	No default value
SocketDevName	No default value
CurrentIsPositive	No default value

**There is no Class properties.**

## States:

<b>States</b>	
<b>Names</b>	<b>Descriptions</b>
<b>ON</b>	Set when the channel is ON.
<b>OFF</b>	Set when the channel is OFF.
<b>FAULT</b>	Set when there is a fault for the channel.
<b>UNKNOWN</b>	*****
<b>ALARM</b>	Set when a non fatal fault occurs.

## Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Current	DEV_DOUBLE	READ_WRITE	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
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
Reset	DEV_VOID	DEV_VOID
MpsReset	DEV_VOID	DEV_VOID
MpsOn	DEV_VOID	DEV_VOID
MpsOff	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::OFF
- Tango::FAULT
- Tango::UNKNOWN
- Tango::ALARM

## 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::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 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::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 4 - On

- **Description:** Sets the channel ON.
- **Argin:**  
DEV\_VOID :
- **Argout:**  
DEV\_VOID :
- **Command allowed for:**
  - Tango::ON
  - Tango::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 5 - Off

- **Description:** Sets the channel OFF.
- **Argin:**  
DEV\_VOID :
- **Argout:**  
DEV\_VOID :
- **Command allowed for:**
  - Tango::ON
  - Tango::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 6 - Reset

- **Description:** Resets the channel.
- **Argin:**  
DEV\_VOID :
- **Argout:**  
DEV\_VOID :
- **Command allowed for:**
  - Tango::ON

- Tango::OFF
- Tango::FAULT
- Tango::UNKNOWN
- Tango::ALARM

## 7 - MpsReset

- **Description:** Resets the main power supply. Normally used only for test purpose.
- **Argin:**  
**DEV\_VOID :**
- **Argout:**  
**DEV\_VOID :**
- **Command allowed for:**
  - Tango::ON
  - Tango::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 8 - MpsOn

- **Description:** Sets MPS ON. Normally used only for test purpose.
- **Argin:**  
**DEV\_VOID :**
- **Argout:**  
**DEV\_VOID :**
- **Command allowed for:**
  - Tango::ON
  - Tango::OFF
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::ALARM

## 9 - MpsOff

- **Description:** Sets MPS OFF. Normally used only for test purpose.
- **Argin:**  
**DEV\_VOID :**

- **Argout:**  
**DEV\_VOID :**

- **Command allowed for:**

- Tango::ON
- Tango::OFF
- Tango::FAULT
- Tango::UNKNOWN
- Tango::ALARM

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