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TwinCAT Library for PSL Environment

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LIGO Scientific Collaboration

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Library	
Title	PSLEnv
Version	1
TwinCAT version	V2.11.0
Name space	
Author	Daniel Sigg
Description	Information about PSL Environment
Error Code	None
Library Dependencies	Error, ReadADC, Omega

User Interface Type	
TYPE PSLEnvInStruct :	
STRUCT	
<pre> LaserRm_AcS_Temp: INT; LaserRm_AcN_Temp: INT; LaserRm_Tb1N_Temp: INT; LaserRm_Tb1S_Temp: INT; AnteRm_Temp: INT; LVEA_Temp: INT; DiodeRm_Temp: INT; ChillerRm_Temp: INT; LaserRm_RH: INT; AnteRm_RH: INT; DiodeRm_RH: INT; ChillerRm_RH: INT; LaserRmToAnteRm: INT; AnteRmtoLVEA_Dpress: INT; DiodeRmToChillerRm_Dpress: INT; </pre>	
END_STRUCT;	
END_TYPE;	
Type Name	PSLEnvStruct
Description	Environment status about the PSL
Definition	Struct

User Interface Type	
TYPE PSLEnvStruct :	
STRUCT	

<pre> LaserRm_AcS_Temp_DegF: LREAL; LaserRm_AcN_Temp_DegF: LREAL; LaserRm_Tb1N_Temp_DegF: LREAL; LaserRm_Tb1S_Temp_DegF: LREAL; LaserRm_AcS_Temp_DegC: LREAL; LaserRm_AcN_Temp_DegC: LREAL; LaserRm_Tb1N_Temp_DegC: LREAL; LaserRm_Tb1S_Temp:_DegC: LREAL; AnteRm_Temp_DegF: LREAL; LVEA_Temp_DegF: LREAL; DiodeRm_Temp_DegF: LREAL; ChillerRm_Temp_DegF: LREAL; AnteRm_Temp_DegC: LREAL; LVEA_Temp_DegC: LREAL; DiodeRm_Temp_DegC: LREAL; ChillerRm_Temp_DegC: LREAL; LaserRm_RH: LREAL; AnteRm_RH: LREAL; DiodeRm_RH: LREAL; ChillerRm_RH: LREAL; LaserRmToAnteRm: LREAL; AnteRmtoLVEA_Dpress: LREAL; DiodeRmToChillerRm_Dpress: LREAL; END_STRUCT; END_TYPE; </pre>	
Type Name	PSLEnvStruct
Description	Structure used in the user interface
Definition	STRUCT

<pre> Function Block TYPE PSLEnvFB: VAR_INPUT PSLEnvIn: PSLEnvInStruct; END_VAR; VAR_OUTPUT PSLEnvOut: PSLEnvOutStruct; END_VAR; VAR_IN_OUT </pre>
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PSLEnv: PSLEnvStruct; END_VAR: END_TYPE;	
Type Name	PSLEnvFB
Description	Function block used to monitor the PSL environment
Definition	Function Block
Input Argument	Name: PSLEnvIn Type: PSLEnvInStruct Description: Input structure
Output Argument	Name: PSLEnvOut Type: PSLEnvOutStruct Description: Output Structure
In/out Argument	Name: PSLEnv Type: PSLEnvStruct Description: User interface structure