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LIGO- E200629-v1 Advanced LIGO 6/14/2012

TwinCAT Library for   
Photodetector DC Monitors

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| **Library** | |
| Title | PhotodetectorDCMonitors |
| Version | 1 |
| TwinCAT version | 2.11 |
| Name space | – |
| Author | Alexa Staley, Daniel Sigg |
| Description | Controls the photodetecor DC monitors |
| Error codes | None |
| Library dependencies | None |

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| **Hardware Input Type**  TYPE PhotodetectorsDCMonitorsInStruct :  STRUCT  PDMonitor1: INT;  PDMonitor2: INT;  PDMonitor3: INT;  PDMonitor4: INT;  PDMonitor5: INT;  PDMonitor6: INT;  PDMonitor7: INT;  PDMonitor8: INT;  END\_STRUCT  END\_TYPE | |
| Type name | PhotodetectorDCMonitorsInStruct |
| Description | Structure of the hardware input that are wired up for the photodetectors DC monitors |
| Definition | STRUCT |
| Element | Name: PDMonitor1  Type: INT  Description: PD monitor 1 |
| Element | Name: PDMonitor2  Type: INT  Description: PD monitor 2 |
| Element | Name: PDMonitor3  Type: INT  Description: PD monitor 3 |
| Element | Name: PDMonitor4  Type: INT  Description: PD monitor 4 |
| Element | Name: PDMonitor5  Type: INT  Description: PD monitor 5 |
| Element | Name: PDMonitor6  Type: INT  Description: PD monitor 6 |
| Element | Name: PDMonitor7  Type: INT  Description: PD monitor 7 |
| Element | Name: PDMonitor8  Type: INT  Description: PD monitor 8 |

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| **User Interface Type**  TYPE PhotodetectorDCMonitorsStruct :  STRUCT  PDMonitor1: LREAL;  PDMonitor2: LREAL;  PDMonitor3: LREAL;  PDMonitor4: LREAL;  PDMonitor5: LREAL;  PDMonitor6: LREAL;  PDMonitor7: LREAL;  PDMonitor8: LREAL;  END\_STRUCT  END\_TYPE | |
| Type name | PhotodetectorDCMonitorsStruct |
| Description | Structure of the user interface tags that are used to control the PD monitors |
| Definition | STRUCT |
| Output Tag | Name: PDMonitor1  Type: LREAL  Description: PD monitor 1 |
| Output Tag | Name: PDMonitor2  Type: LREAL  Description: PD monitor 2 |
| Output Tag | Name: PDMonitor3  Type: LREAL  Description: PD monitor 3 |
| Output Tag | Name: PDMonitor4  Type: LREAL  Description: PD monitor 4 |
| Output Tag | Name: PDMonitor5  Type: LREAL  Description: PD monitor 5 |
| Output Tag | Name: PDMonitor6  Type: LREAL  Description: PD monitor 6 |
| Output Tag | Name: PDMonitor7  Type: LREAL  Description: PD monitor 7 |
| Output Tag | Name: PDMonitor8  Type: LREAL  Description: PD monitor 8 |

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| **Function Block**  FUNCTION\_BLOCK PhotodetectorDCMonitorFB  VAR\_INPUT  PhotodetectorsDCMonitorsIn: PhotodetectorsDCMonitorsInStruct;  END\_VAR  VAR\_IN\_OUT  PhotodetectorsDCMonitors: PhotodetectorsDCMonitorsStruct;  END\_VAR  VAR  END\_VAR  VAR\_IN\_OUTPUT  END\_VAR | |
| Name | PhotodetectorDCMonitorFB |
| Description | Controls the photodetector DC monitors |
| Input argument | Name: PhotodetectorsDCMonitorsIn  Type: PhotodetectorsDCMonitorsInStruct  Description: Input hardware structure |
| In/out argument | Name: PhotodetectorsDCMonitors  Type: PhotodetectorsDCMonitorsStruct  Description: User Interface structure |