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TwinCAT Library for
Photodetector DC Monitors

Alexa Staley, Daniel Sigg

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| **California Institute of Technology****LIGO Project – MS 18-34****1200 E. California Blvd.****Pasadena, CA 91125**Phone (626) 395-2129Fax (626) 304-9834E-mail: info@ligo.caltech.edu | **Massachusetts Institute of Technology****LIGO Project – NW22-295****185 Albany St****Cambridge, MA 02139**Phone (617) 253-4824Fax (617) 253-7014E-mail: info@ligo.mit.edu |
| **LIGO Hanford Observatory****P.O. Box 159****Richland WA 99352**Phone 509-372-8106Fax 509-372-8137 | **LIGO Livingston Observatory****P.O. Box 940****Livingston, LA 70754**Phone 225-686-3100Fax 225-686-7189 |

http://www.ligo.caltech.edu/

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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\_STRUCTEND\_TYPE |
| Type name | PhotodetectorDCMonitorsInStruct |
| Description | Structure of the hardware input that are wired up for the photodetectors DC monitors |
| Definition | STRUCT |
| Element | Name: PDMonitor1Type: INTDescription: PD monitor 1 |
| Element | Name: PDMonitor2Type: INTDescription: PD monitor 2 |
| Element | Name: PDMonitor3Type: INTDescription: PD monitor 3 |
| Element | Name: PDMonitor4Type: INTDescription: PD monitor 4 |
| Element | Name: PDMonitor5Type: INTDescription: PD monitor 5 |
| Element | Name: PDMonitor6Type: INTDescription: PD monitor 6 |
| Element | Name: PDMonitor7Type: INTDescription: PD monitor 7 |
| Element | Name: PDMonitor8Type: INTDescription: PD monitor 8 |

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| **User Interface Type**TYPE PhotodetectorDCMonitorsStruct :STRUCTPDMonitor1: LREAL;PDMonitor2: LREAL;PDMonitor3: LREAL;PDMonitor4: LREAL;PDMonitor5: LREAL;PDMonitor6: LREAL;PDMonitor7: LREAL;PDMonitor8: LREAL;END\_STRUCTEND\_TYPE |
| Type name | PhotodetectorDCMonitorsStruct |
| Description | Structure of the user interface tags that are used to control the PD monitors |
| Definition | STRUCT |
| Output Tag | Name: PDMonitor1Type: LREALDescription: PD monitor 1 |
| Output Tag | Name: PDMonitor2Type: LREALDescription: PD monitor 2 |
| Output Tag | Name: PDMonitor3Type: LREALDescription: PD monitor 3 |
| Output Tag | Name: PDMonitor4Type: LREALDescription: PD monitor 4 |
| Output Tag | Name: PDMonitor5Type: LREALDescription: PD monitor 5 |
| Output Tag | Name: PDMonitor6Type: LREALDescription: PD monitor 6 |
| Output Tag | Name: PDMonitor7Type: LREALDescription: PD monitor 7 |
| Output Tag | Name: PDMonitor8Type: LREALDescription: PD monitor 8 |

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| **Function Block**FUNCTION\_BLOCK PhotodetectorDCMonitorFBVAR\_INPUTPhotodetectorsDCMonitorsIn: PhotodetectorsDCMonitorsInStruct;END\_VARVAR\_IN\_OUTPhotodetectorsDCMonitors: PhotodetectorsDCMonitorsStruct;END\_VARVAREND\_VARVAR\_IN\_OUTPUTEND\_VAR |
| Name | PhotodetectorDCMonitorFB |
| Description | Controls the photodetector DC monitors  |
| Input argument | Name: PhotodetectorsDCMonitorsInType: PhotodetectorsDCMonitorsInStructDescription: Input hardware structure |
| In/out argument | Name: PhotodetectorsDCMonitorsType: PhotodetectorsDCMonitorsStructDescription: User Interface structure |