IO-Link

PLC Integration of CSL710_1021

IO-Link service data function block + process data parser function for Beckhoff (TwinCAT 3.x) PLC systems in combination with a EtherCAT IO-Link Master

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1 Legal information

1.1 Disclaimer

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2 About this document

Please read this chapter carefully before working with this documentation and the Leuze IO-Link device.

2.1 Purpose of use

These instructions have been designed for the technical personnel for the use of the IO-Link PLC blocks.

These instructions are intended to provide support during the commissioning of a Leuze IO-Link sensor using standard software from Siemens. The described module is part of this standard software.

2.2 Target group

These instructions are addressed to programming engineers and the operators of machines and systems, which are operated by one or several IO-Link devices. They also address people, who connect the IO-Link device via an IO-Link-Master-Gateway to a PLC-Control for data exchange.

3 General use of function block

3.1 Short description

The function block "FB_Leuze_IOL_ CSL710_1021" simplifies the usage of Leuze IO-Link devices on Beckhoff (TwinCAT 3.x) PLC controls. This FB supports IO-Link Masters which can be connected via EtherCAT to the PLC system.

The function block is device type-specific and thus only suitable for the appropriate Leuze IO-Link devices. The FB interprets the call-up of the acyclic service data between the PLC and the IO-Link device.

The IO-Link function block can only be used in combination with the listed helper functions / libraries.

3.2 Calling and designation


```
                        FB_Leuze_IOL_xxx
— bExecute    BOOL                              BOOL  bDone —
— sNetID      T_AmsNetID                        BOOL  bBusy —
— nPort       T_AmsPort                         BOOL  bError —
— nIdxGroup   UDINT              ST_Leuze_IOL_Error  stErrorCode —
— bRW         BOOL
— tTimeOut    TIME
— stDeviceData  ST_Leuze_IOL_xxx
```

Fig. 3.1:   Example of module call

3.3 Configuration

Tab. 3.1:   Parameter IN

Parameter	Data type	Description
bExecute	Bool	Positive trigger: Start data transfer
bRW	Bool	Read or write the selected IO-Link parameter. FALSE: Read parameter TRUE: Write Parameter
nPort	T_AmsPort	Port number of the ADS device.
sNetId	T_AmsNetID	String containing the AMS network identifier of the target device to which the ADS command is directed. Beckhoff EL6224/EP6224: AoeNetId of the IO-Link Master
nIdxGroup	UDInt	Index group number.
tTimeOut	Time	Time, after a Timeout-Error is triggered.

Tab. 3.2:   Parameter INOUT

Parameter	Data type	Description
stDeviceData	ST_Leuze_IOL_ CSL710_1021	Sensor data

See structure description of ST_Leuze_IOL_ CSL710_1021 in chapter 7.

Tab. 3.3:   Parameter OUT

Parameter	Data type	Description
bDone	Bool	Indicates whether data is valid.

Parameter	Data type	Description
bBusy	Bool	Request in process. FALSE: Request is terminated TRUE: Request is being processed
bError	Bool	Error flag FALSE: No error TRUE: Error detected
stErrorCode	ST_Leuze_IOL_Error	Status of the function block

See structure description of ST_Leuze_IOL_Error in chapter 6.

3.4 Method of function

The function block uses the data structure "ST_Leuze_IOL_ CSL710_1021". The PLC data structure contains the values of all IO-Link variables. Before you can use it, the structure must be instantiated by a data block. Each IO-Link FB parameter has a data point representing it in this data structure. This data point will be actualized every time a read request was executed successfully.

The desired parameters can be selected via the input variables. Depending on the device definition, IO-Link parameters are read or writable. The input variable must be "bRW" = FALSE to read parameter. The value that should be written can be defined in the data structure, as soon as the input parameter "bRW" = TRUE. You start each transfer by calling up the "FB_Leuze_IOL_ CSL710_1021" with a positive trigger at the "bExecute" input. As long as there is no valid answer the output "bBusy" is TRUE. In the case that the chosen timeout period has elapsed a timeout error will be generated and the thread will be terminated. The "bDone" = TRUE output shows that the transmission was successful. The outputs retain there states as long as there is no new positive trigger at the "bExecute" input again.

The function block allows you to read or write multiple IO-Link parameters sequentially (multi-selection). Please note that it may happen, that a single parameter can not be written. The function block aborts at this point and it is possible, that the IO-Link device contains an inconsistent set of parameters.

3.5 Behavior when error occurs

An error bit (bError) is set and an error code (ST_Leuze_IOL_Error) generated, if there is a spurious input value or an incorrect input connection of the FB. In this case, no further processing is carried out, until the input has been corrected.

4 Integration into the PLC project

The function block "FB_Leuze_IOL_ CSL710_1021" is a part of the TwinCAT V3.x library. The library can be installed by using the Library Repository. Afterwards the library can be added to your project (References --> Add library...).

Integration step by step:

- Download the library

- Open the Library repository in Library Manager tab in Beckhoff TwinCAT

- Click Install... and select downloaded library

- Open Add library in Library Manager tab

- Find installed library under Leuze electronic GmbH + Co. KG

	NOTICE
(i)	If several devices connect to the IO-Link Master, you can only exchange acyclic data (service data) with one device at the same time. Due this restriction, the service data communication blocks must to be blocked against each other.

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5 Process data parser function

The function F_Leuze_PD_ CSL710_1021 simplifies the interpretation of composed IO-Link process data. This data is provided as a data structure on the PLC side. Some sensors supports different process data output. User must select mode of PD according to the sensors settings.

The function is device type-specific and thus only suitable for the appropriated Leuze IO-Link devices.

5.1 Calling and designation


```
                          F_Leuze_PD_xxx
—aProcessData ARRAY [0..0] OF BYTE      ST_Leuze_PD_xxx F_Leuze_PD_xxx—
                                                   BOOL bError—
```

Fig. 5.1:   Example of process data parsing function call

5.2 Configuration

Tab. 5.1:   Parameters

Parameter name	Declaration	Data type	Description
aProcessData	INPUT	ARRAY OF BYTE	Raw process data of the IO-Link device.
nPDMode	INPUT	INT	Mode of the PD. User must select mode of PD according to the sensors settings.
bError	OUTPUT	BOOL	Error flag FALSE: No error TRUE: Error detected
F_Leuze_PD_ CSL710_1021	OUTPUT	ST_Leuze_PD_ CSL710_1021	Reference to the instance of the data structure ST_Leuze_PD_ CSL710_1021. The structure includes the disaggregated values of the process data.

See structure description of ST_Leuze_PD_ CSL710_1021 in chapter 7.

6   Error description

The parameter "ErrorCode" can be interpreted using the PLC data type ST_Leuze_IOL_Error. This data type contains the following error information:

Tab. 6.1:   ST_Leuze_IOL_Error description

Parameter name	Data type	Description
ErrorStatus.nBlockError	WORD	Error number representing FB where error occurred
ErrorStatus.nAdsReadError	UDINT	ADS read error code
ErrorStatus.nAdsWriteError	UDINT	ADS write error code
ErrorStatus.nIndex	INT	IO-Link index to which the error code refers
ErrorStatus.nSubIndex	INT	IO-Link sub-index to which the error code refers

Tab. 6.2:   Error description for nBlockError

Error code (nBlockError)	Error description
0x0000	No error
0x8001	Time out error occurred
0x8002	No parameter selected
0x8003	Error in FB_Leuze_IOL_AdsReadWrite block

For additional information see the Beckhoff ADS Return Codes (https://infosys.beckhoff.com).

7 Data structures

Tab. 7.1:   ST_Leuze_IOL_ CSL710_1021

Parameter name	Data type	Description
stDeviceData.stSelection.stCommands.bDeviceReset	BOOL	[WRITE_ONLY] Device Reset
stDeviceData.stSelection.stCommands.bApplicationReset	BOOL	[WRITE_ONLY] Application Reset
stDeviceData.stSelection.stCommands.bRestoreFactorySettings	BOOL	[WRITE_ONLY] Restore Factory Settings
stDeviceData.stSelection.stCommands.bTeach	BOOL	[WRITE_ONLY] Teach
stDeviceData.stSelection.stCommands.bSaveAllSettings	BOOL	[WRITE_ONLY] Save all settings
stDeviceData.stSelection.stCommands.bStartDatastorage	BOOL	[WRITE_ONLY] Start DataStorage
stDeviceData.stSelection.stCommands.bStopDatastorage	BOOL	[WRITE_ONLY] Stop DataStorage
stDeviceData.stSelection.stDirectParameters1.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stDirectParameters1.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stDirectParameters1.bReserved_1	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bMasterCycleTime	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bMinCycleTime	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1. bMSequenceCapability	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bIoLinkVersionId	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1. bProcessDataInputLength	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1. bProcessDataOutputLength	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bVendorId1	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bVendorId2	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bDeviceId1	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bDeviceId2	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bDeviceId3	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bReserved_13	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bReserved_14	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDirectParameters1.bReserved_15	BOOL	[READ_ONLY]

Parameter name	Data type	Description
stDeviceData.stSelection.stDirectParameters2.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter1	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter2	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter3	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter4	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter5	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter6	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter7	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter8	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter9	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter10	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter11	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter12	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter13	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter14	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter15	BOOL	[READ_WRITE]
stDeviceData.stSelection.stDirectParameters2.bDeviceSpecificParameter16	BOOL	[READ_WRITE]
stDeviceData.stSelection.bStandardCommand	BOOL	[WRITE_ONLY]
stDeviceData.stSelection.stDeviceAccessLocks.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.bVendorName	BOOL	[READ_ONLY]
stDeviceData.stSelection.bVendorText	BOOL	[READ_ONLY]
stDeviceData.stSelection.bProductName	BOOL	[READ_ONLY]
stDeviceData.stSelection.bProductId	BOOL	[READ_ONLY]
stDeviceData.stSelection.bProductText	BOOL	[READ_ONLY]
stDeviceData.stSelection.bSerialNumber	BOOL	[READ_ONLY]
stDeviceData.stSelection.bHardwareVersion	BOOL	[READ_ONLY]
stDeviceData.stSelection.bFirmwareVersion	BOOL	[READ_ONLY]

Parameter name	Data type	Description
stDeviceData.stSelection.bApplicationSpecificTag	BOOL	[READ_WRITE]
stDeviceData.stSelection.bErrorCount	BOOL	[READ_ONLY]
stDeviceData.stSelection.bDeviceStatus	BOOL	[READ_ONLY]
stDeviceData.stSelection.stDetailedDeviceStatus.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.bReceiverPartNo	BOOL	[READ_ONLY] Receiver order number
stDeviceData.stSelection.bTransmitterProductDesignation	BOOL	[READ_ONLY] Transmitter type designation
stDeviceData.stSelection.bTransmitterPartNo	BOOL	[READ_ONLY] Transmitter order number
stDeviceData.stSelection.bTransmitterSerialNumber	BOOL	[READ_ONLY] 9-digit number for explicit product identification
stDeviceData.stSelection.stDeviceCharacteristics.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.bTeachStatus	BOOL	[READ_ONLY] Status information about teach operation
stDeviceData.stSelection.stAlignment.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stGlobalSettings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.bCslStatusInformation	BOOL	[READ_ONLY] Detailed device status code
stDeviceData.stSelection.stBlankingSettings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stTeachSettings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.bTeachHeightArea	BOOL	[WRITE_ONLY] Teach a single beam area
stDeviceData.stSelection.bAutoSplitting	BOOL	[WRITE_ONLY] Splitting all physically present beams into areas of identical size. | This automatically configures the fields of all areas.
stDeviceData.stSelection.bShowDetailedAreaConfiguration	BOOL	[READ_WRITE] Choose the area (1..8) that requires detailed configuration.
stDeviceData.stSelection.stDigitalIoPin2Settings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stDigitalIoPin5Settings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stDigitalIoPin6Settings.bAll	BOOL	[READ_WRITE] all parameters of complex data type

Parameter name	Data type	Description
stDeviceData.stSelection.stDigitalIoPin7Settings.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea01.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea02.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea03.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea04.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea05.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea06.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea07.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stConfigurationArea08.bAll	BOOL	[READ_WRITE] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_100.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_101.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_102.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_103.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_104.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stPdBeamstream_105.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stSelection.stBeamstreamMask.bAll	BOOL	[READ_ONLY] all parameters of complex data type
stDeviceData.stData.stCommands.nDeviceReset	UINT	[WRITE_ONLY] Device Reset
stDeviceData.stData.stCommands.nApplicationReset	UINT	[WRITE_ONLY] Application Reset
stDeviceData.stData.stCommands.nRestoreFactorySettings	UINT	[WRITE_ONLY] Restore Factory Settings
stDeviceData.stData.stCommands.nTeach	UINT	[WRITE_ONLY] Teach
stDeviceData.stData.stCommands.nSaveAllSettings	UINT	[WRITE_ONLY] Save all settings
stDeviceData.stData.stCommands.nStartDatastorage	UINT	[WRITE_ONLY] Start DataStorage

Parameter name	Data type	Description
stDeviceData.stData.stCommands.nStopDatastorage	UINT	[WRITE_ONLY] Stop DataStorage
stDeviceData.stData.stDirectParameters1.nReserved_1	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nMasterCycleTime	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nMinCycleTime	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nMSequenceCapability	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nIoLinkVersionId	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nProcessDataInputLength	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nProcessDataOutputLength	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nVendorId1	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nVendorId2	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nDeviceId1	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nDeviceId2	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nDeviceId3	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nReserved_13	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nReserved_14	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters1.nReserved_15	UINT	[READ_ONLY]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter1	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter2	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter3	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter4	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter5	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter6	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter7	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter8	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter9	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter10	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2.nDeviceSpecificParameter11	UINT	[READ_WRITE]

Parameter name	Data type	Description
stDeviceData.stData.stDirectParameters2. nDeviceSpecificParameter12	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2. nDeviceSpecificParameter13	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2. nDeviceSpecificParameter14	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2. nDeviceSpecificParameter15	UINT	[READ_WRITE]
stDeviceData.stData.stDirectParameters2. nDeviceSpecificParameter16	UINT	[READ_WRITE]
stDeviceData.stData.nStandardCommand	UINT	[WRITE_ONLY]
stDeviceData.stData.stDeviceAccessLocks. bParameterWriteAccessLock	BOOL	[READ_WRITE]
stDeviceData.stData.stDeviceAccessLocks.bDataStorageLock	BOOL	[READ_WRITE]
stDeviceData.stData.stDeviceAccessLocks. bLocalParameterizationLock	BOOL	[READ_WRITE]
stDeviceData.stData.stDeviceAccessLocks. bLocalUserInterfaceLock	BOOL	[READ_WRITE]
stDeviceData.stData.sVendorName	STRING	[READ_ONLY]
stDeviceData.stData.sVendorText	STRING	[READ_ONLY]
stDeviceData.stData.sProductName	STRING	[READ_ONLY]
stDeviceData.stData.sProductId	STRING	[READ_ONLY]
stDeviceData.stData.sProductText	STRING	[READ_ONLY]
stDeviceData.stData.sSerialNumber	STRING	[READ_ONLY]
stDeviceData.stData.sHardwareVersion	STRING	[READ_ONLY]
stDeviceData.stData.sFirmwareVersion	STRING	[READ_ONLY]
stDeviceData.stData.sApplicationSpecificTag	STRING	[READ_WRITE]
stDeviceData.stData.nErrorCount	UINT	[READ_ONLY]
stDeviceData.stData.nDeviceStatus	UINT	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_1	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_2	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_3	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_4	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_5	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_6	STRING	[READ_ONLY]

Parameter name	Data type	Description
stDeviceData.stData.stDetailedDeviceStatus.sItem_7	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_8	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_9	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_10	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_11	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_12	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_13	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_14	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_15	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_16	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_17	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_18	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_19	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_20	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_21	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_22	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_23	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_24	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_25	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_26	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_27	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_28	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_29	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_30	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_31	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_32	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_33	STRING	[READ_ONLY]

Parameter name	Data type	Description
stDeviceData.stData.stDetailedDeviceStatus.sItem_34	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_35	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_36	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_37	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_38	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_39	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_40	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_41	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_42	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_43	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_44	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_45	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_46	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_47	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_48	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_49	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_50	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_51	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_52	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_53	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_54	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_55	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_56	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_57	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_58	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_59	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_60	STRING	[READ_ONLY]

Parameter name	Data type	Description
stDeviceData.stData.stDetailedDeviceStatus.sItem_61	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_62	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_63	STRING	[READ_ONLY]
stDeviceData.stData.stDetailedDeviceStatus.sItem_64	STRING	[READ_ONLY]
stDeviceData.stData.sReceiverPartNo	STRING	[READ_ONLY] Receiver order number
stDeviceData.stData.sTransmitterProductDesignation	STRING	[READ_ONLY] Transmitter type designation
stDeviceData.stData.sTransmitterPartNo	STRING	[READ_ONLY] Transmitter order number
stDeviceData.stData.sTransmitterSerialNumber	STRING	[READ_ONLY] 9-digit number for explicit product identification
stDeviceData.stData.stDeviceCharacteristics.nBeamSpacing	UINT	[READ_ONLY]
stDeviceData.stData.stDeviceCharacteristics. nNumberOfPhysicalIndividualBeams	UINT	[READ_ONLY]
stDeviceData.stData.stDeviceCharacteristics. nNumberOfConfiguredLogicalBeams	UINT	[READ_ONLY]
stDeviceData.stData.stDeviceCharacteristics. nNumberOfOpticalCascades	UINT	[READ_ONLY]
stDeviceData.stData.stDeviceCharacteristics.nDeviceCycleTime	UINT	[READ_ONLY]
stDeviceData.stData.nTeachStatus	UINT	[READ_ONLY] Status information about teach operation
stDeviceData.stData.stAlignment.nLastBeamIntensity	UINT	[READ_ONLY]
stDeviceData.stData.stAlignment.nFirstBeamIntensity	UINT	[READ_ONLY]
stDeviceData.stData.stGlobalSettings.nBeamMode	UINT	[READ_WRITE]
stDeviceData.stData.stGlobalSettings. nSmoothingLessThanNInterruptedBeamsWillBeIgnored	UINT	[READ_WRITE]
stDeviceData.stData.stGlobalSettings.nFilterDepth	UINT	[READ_WRITE]
stDeviceData.stData.stGlobalSettings.nDigitalIoSwitchingLevel	UINT	[READ_WRITE]
stDeviceData.stData.stGlobalSettings.nKeyLock	UINT	[READ_WRITE]
stDeviceData.stData.nCslStatusInformation	UINT	[READ_ONLY] Detailed device status code
stDeviceData.stData.stBlankingSettings. nNumberOfAutoblankingAreas	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nAutoblankingDuringTeach	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings.nFunctionBlankingArea1	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nStartBeamBlankingArea1	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nEndBeamBlankingArea1	UINT	[READ_WRITE]

Parameter name	Data type	Description
stDeviceData.stData.stBlankingSettings.nFunctionBlankingArea2	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nStartBeamBlankingArea2	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nEndBeamBlankingArea2	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings.nFunctionBlankingArea3	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nStartBeamBlankingArea3	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nEndBeamBlankingArea3	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings.nFunctionBlankingArea4	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nStartBeamBlankingArea4	UINT	[READ_WRITE]
stDeviceData.stData.stBlankingSettings. nEndBeamBlankingArea4	UINT	[READ_WRITE]
stDeviceData.stData.stTeachSettings. nTypeOfStorageForTeachValues	UINT	[READ_WRITE]
stDeviceData.stData.stTeachSettings.nSensitivitySetting	UINT	[READ_WRITE]
stDeviceData.stData.stTeachSettings.nPowerUpTeach	UINT	[READ_WRITE]
stDeviceData.stData.nTeachHeightArea	INT	[WRITE_ONLY] Teach a single beam area
stDeviceData.stData.nAutoSplitting	INT	[WRITE_ONLY] Splitting all physically present beams into areas of identical size.	This automatically configures the fields of all areas.
stDeviceData.stData.nShowDetailedAreaConfiguration	UINT	[READ_WRITE] Choose the area (1..8) that requires detailed configuration.
stDeviceData.stData.stDigitalIoPin2Settings.nSwitchingLevel	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin2Settings.nIoFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin2Settings. nOperatingModeOfTimeModule	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin2Settings. nTimeConstantForSelectedFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin2Settings.nAreaMapping81	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin5Settings.nSwitchingLevel	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin5Settings.nIoFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin5Settings. nOperatingModeOfTimeModule	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin5Settings. nTimeConstantForSelectedFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin5Settings.nAreaMapping81	UINT	[READ_WRITE]

Parameter name	Data type	Description
stDeviceData.stData.stDigitalIoPin6Settings.nSwitchingLevel	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin6Settings.nIoFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin6Settings. nOperatingModeOfTimeModule	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin6Settings. nTimeConstantForSelectedFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin6Settings.nAreaMapping81	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin7Settings.nSwitchingLevel	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin7Settings.nIoFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin7Settings. nOperatingModeOfTimeModule	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin7Settings. nTimeConstantForSelectedFunction	UINT	[READ_WRITE]
stDeviceData.stData.stDigitalIoPin7Settings.nAreaMapping81	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01.nBeamArea1	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea01. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02.nBeamArea2	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea02. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea03.nBeamArea3	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea03. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea03.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea03.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea03. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]

Parameter name	Data type	Description
stDeviceData.stData.stConfigurationArea03. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04.nBeamArea4	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea04. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05.nBeamArea5	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea05. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06.nBeamArea6	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea06. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07.nBeamArea7	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07. nLogicalBehaviorOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea07. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea08.nBeamArea8	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea08. nLogicalBehaviorOfArea	UINT	[READ_WRITE]

Parameter name	Data type	Description
stDeviceData.stData.stConfigurationArea08.nStartBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea08.nEndBeamOfArea	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea08. nNumberOfBeamsForAreaOn	UINT	[READ_WRITE]
stDeviceData.stData.stConfigurationArea08. nNumberOfBeamsForAreaOff	UINT	[READ_WRITE]
stDeviceData.stData.stPdBeamstream_100.nItem_1	UINT	[READ_ONLY] 8 Bytes
stDeviceData.stData.stPdBeamstream_100.nItem_2	UINT	[READ_ONLY] 8 Bytes
stDeviceData.stData.stPdBeamstream_100.nItem_3	UINT	[READ_ONLY] 8 Bytes
stDeviceData.stData.stPdBeamstream_100.nItem_4	UINT	[READ_ONLY] 8 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_1	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_2	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_3	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_4	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_5	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_6	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_7	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_101.nItem_8	UINT	[READ_ONLY] 16 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_1	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_2	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_3	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_4	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_5	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_6	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_7	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_8	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_9	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_10	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_11	UINT	[READ_ONLY] 32 Bytes

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Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_102.nItem_12	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_13	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_14	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_15	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_102.nItem_16	UINT	[READ_ONLY] 32 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_1	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_2	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_3	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_4	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_5	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_6	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_7	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_8	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_9	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_10	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_11	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_12	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_13	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_14	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_15	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_16	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_17	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_18	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_19	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_20	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_21	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_22	UINT	[READ_ONLY] 64 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_103.nItem_23	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_24	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_25	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_26	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_27	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_28	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_29	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_30	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_31	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_103.nItem_32	UINT	[READ_ONLY] 64 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_1	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_2	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_3	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_4	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_5	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_6	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_7	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_8	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_9	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_10	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_11	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_12	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_13	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_14	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_15	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_16	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_17	UINT	[READ_ONLY] 128 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_104.nItem_18	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_19	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_20	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_21	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_22	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_23	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_24	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_25	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_26	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_27	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_28	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_29	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_30	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_31	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_32	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_33	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_34	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_35	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_36	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_37	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_38	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_39	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_40	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_41	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_42	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_43	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_44	UINT	[READ_ONLY] 128 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_104.nItem_45	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_46	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_47	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_48	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_49	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_50	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_51	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_52	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_53	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_54	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_55	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_56	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_57	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_58	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_59	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_60	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_61	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_62	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_63	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_104.nItem_64	UINT	[READ_ONLY] 128 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_1	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_2	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_3	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_4	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_5	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_6	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_7	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_105.nItem_8	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_9	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_10	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_11	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_12	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_13	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_14	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_15	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_16	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_17	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_18	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_19	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_20	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_21	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_22	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_23	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_24	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_25	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_26	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_27	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_28	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_29	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_30	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_31	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_32	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_33	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_34	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_105.nItem_35	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_36	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_37	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_38	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_39	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_40	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_41	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_42	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_43	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_44	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_45	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_46	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_47	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_48	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_49	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_50	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_51	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_52	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_53	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_54	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_55	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_56	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_57	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_58	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_59	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_60	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_61	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_105.nItem_62	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_63	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_64	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_65	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_66	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_67	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_68	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_69	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_70	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_71	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_72	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_73	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_74	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_75	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_76	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_77	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_78	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_79	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_80	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_81	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_82	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_83	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_84	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_85	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_86	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_87	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_88	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stPdBeamstream_105.nItem_89	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_90	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_91	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_92	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_93	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_94	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_95	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_96	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_97	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_98	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_99	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_100	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_101	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_102	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_103	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_104	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_105	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_106	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_107	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_108	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_109	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_110	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stPdBeamstream_105.nItem_111	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_1	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_2	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_3	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_4	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stBeamstreamMask.nItem_5	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_6	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_7	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_8	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_9	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_10	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_11	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_12	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_13	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_14	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_15	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_16	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_17	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_18	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_19	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_20	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_21	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_22	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_23	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_24	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_25	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_26	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_27	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_28	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_29	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_30	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_31	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stBeamstreamMask.nItem_32	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_33	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_34	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_35	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_36	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_37	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_38	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_39	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_40	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_41	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_42	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_43	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_44	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_45	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_46	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_47	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_48	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_49	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_50	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_51	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_52	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_53	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_54	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_55	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_56	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_57	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_58	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stBeamstreamMask.nItem_59	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_60	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_61	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_62	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_63	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_64	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_65	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_66	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_67	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_68	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_69	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_70	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_71	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_72	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_73	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_74	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_75	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_76	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_77	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_78	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_79	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_80	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_81	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_82	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_83	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_84	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_85	UINT	[READ_ONLY] 222 Bytes

Parameter name	Data type	Description
stDeviceData.stData.stBeamstreamMask.nItem_86	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_87	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_88	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_89	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_90	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_91	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_92	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_93	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_94	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_95	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_96	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_97	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_98	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_99	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_100	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_101	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_102	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_103	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_104	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_105	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_106	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_107	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_108	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_109	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_110	UINT	[READ_ONLY] 222 Bytes
stDeviceData.stData.stBeamstreamMask.nItem_111	UINT	[READ_ONLY] 222 Bytes

Tab. 7.2:   ST_Leuze_PD_ CSL710_1021

Parameter name	Data type	Description
ST_Leuze_PD_CSL710_1021.bMeasurementDataValid	BOOL	
ST_Leuze_PD_CSL710_1021.nNumberOfCycles	UINT	
ST_Leuze_PD_CSL710_1021.nStatusOfAreas81	UINT	

8 Parameter descriptions

Tab. 8.1: IODD parameter descriptions

(AR - Access Rights, R - Read only, W - Write only, RW - Read and Write, NS - Not specified)

Parameter	Index	Subindex	Data type	Default	AR	Description
Commands			RecordT		W	
Device Reset			UIntegerT	128	W	Device Reset
Application Reset			UIntegerT	129	W	Application Reset
Restore Factory Settings			UIntegerT	130	W	Restore Factory Settings
Teach			UIntegerT	162	W	Teach
Save all settings			UIntegerT	163	W	Save all settings
Start DataStorage			UIntegerT	200	W	Start DataStorage
Stop DataStorage			UIntegerT	201	W	Stop DataStorage
Direct Parameters 1	0	0	RecordT		RW	
Reserved	0	1	UIntegerT		R	
Master Cycle Time	0	2	UIntegerT		R	
Min Cycle Time	0	3	UIntegerT		R	
M-Sequence Capability	0	4	UIntegerT		R	
IO-Link Version ID	0	5	UIntegerT	17	R	
Process Data Input Length	0	6	UIntegerT		R	
Process Data Output Length	0	7	UIntegerT		R	
Vendor ID 1	0	8	UIntegerT		R	
Vendor ID 2	0	9	UIntegerT		R	
Device ID 1	0	10	UIntegerT		R	
Device ID 2	0	11	UIntegerT		R	
Device ID 3	0	12	UIntegerT		R	
Reserved	0	13	UIntegerT		R	
Reserved	0	14	UIntegerT		R	
Reserved	0	15	UIntegerT		R	

Parameter	Index	Subindex	Data type	Default	AR	Description
Standard Command	0	16	UIntegerT		W	(0 ... 63): Reserved 128: Device Reset 129: Application Reset 130: Restore Factory Settings (131 ... 159): Reserved
Direct Parameters 2	1	0	RecordT		RW	
Device Specific Parameter 1	1	1	UIntegerT		RW	
Device Specific Parameter 2	1	2	UIntegerT		RW	
Device Specific Parameter 3	1	3	UIntegerT		RW	
Device Specific Parameter 4	1	4	UIntegerT		RW	
Device Specific Parameter 5	1	5	UIntegerT		RW	
Device Specific Parameter 6	1	6	UIntegerT		RW	
Device Specific Parameter 7	1	7	UIntegerT		RW	
Device Specific Parameter 8	1	8	UIntegerT		RW	
Device Specific Parameter 9	1	9	UIntegerT		RW	
Device Specific Parameter 10	1	10	UIntegerT		RW	
Device Specific Parameter 11	1	11	UIntegerT		RW	
Device Specific Parameter 12	1	12	UIntegerT		RW	
Device Specific Parameter 13	1	13	UIntegerT		RW	
Device Specific Parameter 14	1	14	UIntegerT		RW	
Device Specific Parameter 15	1	15	UIntegerT		RW	
Device Specific Parameter 16	1	16	UIntegerT		RW	
Standard Command	2	0	UIntegerT	128	W	(0 ... 63): Reserved 128: Device Reset 129: Application Reset 130: Restore Factory Settings (131 ... 159): Reserved 162: Teach 163: Save all settings 200: Start DataStorage 201: Stop DataStorage
Device Access Locks	12	0	RecordT		RW	
Parameter (write) Access Lock	12	1	BooleanT		RW	
Data Storage Lock	12	2	BooleanT		RW	
Local Parameterization Lock	12	3	BooleanT		RW	

Parameter	Index	Subindex	Data type	Default	AR	Description
Local User Interface Lock	12	4	BooleanT		RW	
Vendor Name	16	0	StringT		R	
Vendor Text	17	0	StringT		R	
Product Name	18	0	StringT		R	
Product ID	19	0	StringT		R	
Product Text	20	0	StringT		R	
Serial Number	21	0	StringT		R	
Hardware Version	22	0	StringT		R	
Firmware Version	23	0	StringT		R	
Application Specific Tag	24	0	StringT		RW	
Error Count	32	0	UIntegerT		R	
Device Status	36	0	UIntegerT		R	0: Device is OK 1: Maintenance required 2: Out of specification 3: Functional check 4: Failure (5 ... 255): Reserved
Detailed Device Status	37	0	ArrayT		R	
	37	0	OctetStringT		R	
Receiver part no.	64	0	StringT		R	Receiver order number
Transmitter product designation	65	0	StringT		R	Transmitter type designation
Transmitter part no.	66	0	StringT		R	Transmitter order number
Transmitter serial number	67	0	StringT		R	9-digit number for explicit product identification
Device characteristics	68	0	RecordT		R	Device characteristics specify the beam spacing, the number of physical / logical beams and the cycle time of the device.
Beam spacing	68	1	UIntegerT	5	R	(1 ... 400)
Number of physical individual beams	68	2	UIntegerT	16	R	
Number of configured logical beams	68	3	UIntegerT	16	R	
Number of optical cascades	68	4	UIntegerT	1	R	
Device cycle time	68	5	UIntegerT	1000	R	

Parameter	Index	Subindex	Data type	Default	AR	Description
Teach status	69	0	UIntegerT	0	R	Status information about teach operation 0: Teach ok 1: Teach busy 128: Teach error (129 ... 255)
Alignment	70	0	RecordT		R	Alignment level of first and last beams. Values are different if function reserve changes.
Last beam intensity	70	1	UIntegerT	0	R	
First beam intensity	70	2	UIntegerT	0	R	
Global settings	71	0	RecordT		RW	Global settings allow setting of beam operation mode (parallel-/diagonal-/cross-beam), min. object size for evaluation (smoothing), etc.
Beam mode	71	1	UIntegerT	0	RW	0: Parallel-beam scanning 1: Diagonal-beam scanning 2: Crossed-beam scanning
Smoothing - less than N interrupted beams will be ignored	71	2	UIntegerT	1	RW	(1 ... 255)
Filter depth	71	3	UIntegerT	2	RW	(1 ... 255)
Digital IO switching level	71	4	UIntegerT	1	RW	0: Transistor, NPN 1: Transistor, PNP
Key Lock	71	5	UIntegerT	0	RW	0: Unlocked 1: Locked 2: Volatile
CSL status information	72	0	UIntegerT		R	Detailed device status code
Blanking settings	73	0	RecordT		RW	Up to 4 blanking areas can be configured. Deactivated beams can be setted to 0, 1 or the logical value of the neighbor beam. If autoblanking is activated, the number of chosen blanking areas will be configured with teach command.
Number of autoblanking areas	73	1	UIntegerT	4	RW	(0 ... 4)
Autoblanking (during teach)	73	2	UIntegerT	0	RW	0: Not active (only manual configuration possible) 1: Active (blanking areas autom. configured by teach)
Function blanking area 1	73	3	UIntegerT	0	RW	0: No beams blanked 1: Logical value 0 for blanked beams 2: Logical value 1 for blanked beams 3: Logical value = same as neighbor beam with lower beam number 4: Logical value = same as neighbor beam with higher beam number
Start beam blanking area 1	73	4	UIntegerT	1	RW	(1 ... 1776)
End beam blanking area 1	73	5	UIntegerT	1	RW	(1 ... 1776)

Parameter	Index	Subindex	Data type	Default	AR	Description
Function blanking area 2	73	6	UIntegerT	0	RW	0: No beams blanked 1: Logical value 0 for blanked beams 2: Logical value 1 for blanked beams 3: Logical value = same as neighbor beam with lower beam number 4: Logical value = same as neighbor beam with higher beam number
Start beam blanking area 2	73	7	UIntegerT	1	RW	(1 ... 1776)
End beam blanking area 2	73	8	UIntegerT	1	RW	(1 ... 1776)
Function blanking area 3	73	9	UIntegerT	0	RW	0: No beams blanked 1: Logical value 0 for blanked beams 2: Logical value 1 for blanked beams 3: Logical value = same as neighbor beam with lower beam number 4: Logical value = same as neighbor beam with higher beam number
Start beam blanking area 3	73	10	UIntegerT	1	RW	(1 ... 1776)
End beam blanking area 3	73	11	UIntegerT	1	RW	(1 ... 1776)
Function blanking area 4	73	12	UIntegerT	0	RW	0: No beams blanked 1: Logical value 0 for blanked beams 2: Logical value 1 for blanked beams 3: Logical value = same as neighbor beam with lower beam number 4: Logical value = same as neighbor beam with higher beam number
Start beam blanking area 4	73	13	UIntegerT	1	RW	(1 ... 1776)
End beam blanking area 4	73	14	UIntegerT	1	RW	(1 ... 1776)
Teach settings	74	0	RecordT		RW	In most of applications it is generally recommended to store teach results power fail safe. Moreover, corresponding to the selected function reserve at teach operation, the sensitivity will be higher or smaller. Small function reserve = high sensitivity
Type of storage for teach values	74	1	UIntegerT	0	RW	0: Non-volatile storage of teach values 1: Teach values only saved while voltage ON
Sensitivity setting	74	2	UIntegerT	0	RW	0: High function reserve for robust application 1: Medium function reserve 2: Low function reserve
Power-Up Teach	74	3	UIntegerT	0	RW	0: Deactivated 1: Activated

Parameter	Index	Subindex	Data type	Default	AR	Description
Teach height area	75	0	IntegerT		W	Teach a single beam area 1: Height area 1 (active: No interrupted beam - not active: >= 1 beam interrupted) 2: Height area 2 (active: No interrupted beam - not active: >= 1 beam interrupted) 3: Height area 3 (active: No interrupted beam - not active: >= 1 beam interrupted) 4: Height area 4 (active: No interrupted beam - not active: >= 1 beam interrupted) 5: Height area 5 (active: No interrupted beam - not active: >= 1 beam interrupted) 6: Height area 6 (active: No interrupted beam - not active: >= 1 beam interrupted) 7: Height area 7 (active: No interrupted beam - not active: >= 1 beam interrupted) 8: Height area 8 (active: No interrupted beam - not active: >= 1 beam interrupted)

Parameter	Index	Subindex	Data type	Default	AR	Description
Auto-Splitting	76	0	IntegerT		W	Splitting all physically present beams into areas of identical size. This automatically configures the fields of all areas. 1: 1 Area (active: No interrupted beam - not active: >= 1 beam interrupted) 2: 2 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 3: 3 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 4: 4 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 5: 5 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 6: 6 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 7: 7 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 8: 8 Areas (active: No interrupted beam - not active: >= 1 beam interrupted) 257: 1 Area (active: >= 1 beam not interrupted - not active: all beams interrupted) 258: 2 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 259: 3 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 260: 4 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 261: 5 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 262: 6 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 263: 7 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted) 264: 8 Areas (active: >= 1 beam not interrupted - not active: all beams interrupted)
Show detailed area configuration	77	0	UIntegerT	0	RW	Choose the area (1..8) that requires detailed configuration. 0: Beam area 01 1: Beam area 02 2: Beam area 03 3: Beam area 04 4: Beam area 05 5: Beam area 06 6: Beam area 07 7: Beam area 08
Digital IO Pin 2 Settings	80	0	RecordT		RW	Configuration of In-/Outputs: Pin 2 / 5 / 6 / 7
Switching level	80	1	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching

Parameter	Index	Subindex	Data type	Default	AR	Description
IO Function	80	2	UIntegerT	2	RW	0: Deactivated 1: Trigger input 2: Teach input 3: Area output 4: Warning output
Operating mode of time module	80	3	UIntegerT	0	RW	0: Deactivated 1: Start-up delay 2: Switch-off delay 3: Pulse stretching 4: Pulse suppression
Time constant for selected function	80	4	UIntegerT	0	RW	
Area mapping 8..1	80	5	UIntegerT	1	RW	
Digital IO Pin 5 Settings	81	0	RecordT		RW	Configuration of In-/Outputs: Pin 2 / 5 / 6 / 7
Switching level	81	1	UIntegerT	1	RW	0: Normal - light switching 1: Inverted - dark switching
IO Function	81	2	UIntegerT	3	RW	0: Deactivated 1: Trigger input 2: Teach input 3: Area output 4: Warning output
Operating mode of time module	81	3	UIntegerT	0	RW	0: Deactivated 1: Start-up delay 2: Switch-off delay 3: Pulse stretching 4: Pulse suppression
Time constant for selected function	81	4	UIntegerT	0	RW	
Area mapping 8..1	81	5	UIntegerT	2	RW	
Digital IO Pin 6 Settings	82	0	RecordT		RW	Configuration of In-/Outputs: Pin 2 / 5 / 6 / 7
Switching level	82	1	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
IO Function	82	2	UIntegerT	3	RW	0: Deactivated 1: Trigger input 2: Teach input 3: Area output 4: Warning output
Operating mode of time module	82	3	UIntegerT	0	RW	0: Deactivated 1: Start-up delay 2: Switch-off delay 3: Pulse stretching 4: Pulse suppression
Time constant for selected function	82	4	UIntegerT	0	RW	
Area mapping 8..1	82	5	UIntegerT	4	RW	
Digital IO Pin 7 Settings	83	0	RecordT		RW	Configuration of In-/Outputs: Pin 2 / 5 / 6 / 7
Switching level	83	1	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
IO Function	83	2	UIntegerT	4	RW	0: Deactivated 1: Trigger input 2: Teach input 3: Area output 4: Warning output

Parameter	Index	Subindex	Data type	Default	AR	Description
Operating mode of time module	83	3	UIntegerT	0	RW	0: Deactivated 1: Start-up delay 2: Switch-off delay 3: Pulse stretching 4: Pulse suppression
Time constant for selected function	83	4	UIntegerT	0	RW	
Area mapping 8..1	83	5	UIntegerT	8	RW	
Configuration Area 01	90	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 1	90	1	UIntegerT	1	RW	0: Deactivated 1: Activated
Logical behavior of area	90	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	90	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	90	4	UIntegerT	32	RW	(1 ... 1776)
Number of beams for area ON	90	5	UIntegerT	32	RW	(0 ... 1776)
Number of beams for area OFF	90	6	UIntegerT	31	RW	(0 ... 1776)
Configuration Area 02	91	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 2	91	1	UIntegerT	1	RW	0: Deactivated 1: Activated
Logical behavior of area	91	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	91	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	91	4	UIntegerT	32	RW	(1 ... 1776)
Number of beams for area ON	91	5	UIntegerT	32	RW	(0 ... 1776)
Number of beams for area OFF	91	6	UIntegerT	31	RW	(0 ... 1776)
Configuration Area 03	92	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 3	92	1	UIntegerT	1	RW	0: Deactivated 1: Activated
Logical behavior of area	92	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	92	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	92	4	UIntegerT	32	RW	(1 ... 1776)
Number of beams for area ON	92	5	UIntegerT	32	RW	(0 ... 1776)
Number of beams for area OFF	92	6	UIntegerT	31	RW	(0 ... 1776)

Parameter	Index	Subindex	Data type	Default	AR	Description
Configuration Area 04	93	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 4	93	1	UIntegerT	1	RW	0: Deactivated 1: Activated
Logical behavior of area	93	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	93	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	93	4	UIntegerT	32	RW	(1 ... 1776)
Number of beams for area ON	93	5	UIntegerT	32	RW	(0 ... 1776)
Number of beams for area OFF	93	6	UIntegerT	31	RW	(0 ... 1776)
Configuration Area 05	94	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 5	94	1	UIntegerT	0	RW	0: Deactivated 1: Activated
Logical behavior of area	94	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	94	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	94	4	UIntegerT	1	RW	(1 ... 1776)
Number of beams for area ON	94	5	UIntegerT	0	RW	(0 ... 1776)
Number of beams for area OFF	94	6	UIntegerT	0	RW	(0 ... 1776)
Configuration Area 06	95	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 6	95	1	UIntegerT	0	RW	0: Deactivated 1: Activated
Logical behavior of area	95	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	95	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	95	4	UIntegerT	1	RW	(1 ... 1776)
Number of beams for area ON	95	5	UIntegerT	0	RW	(0 ... 1776)
Number of beams for area OFF	95	6	UIntegerT	0	RW	(0 ... 1776)
Configuration Area 07	96	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 7	96	1	UIntegerT	0	RW	0: Deactivated 1: Activated
Logical behavior of area	96	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching

Parameter	Index	Subindex	Data type	Default	AR	Description
Start beam of area	96	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	96	4	UIntegerT	1	RW	(1 ... 1776)
Number of beams for area ON	96	5	UIntegerT	0	RW	(0 ... 1776)
Number of beams for area OFF	96	6	UIntegerT	0	RW	(0 ... 1776)
Configuration Area 08	97	0	RecordT		RW	Configuration of area: Define condition to ensure that area will be logical 1 or 0. Use the numbers of the logical beams.
Beam area 8	97	1	UIntegerT	0	RW	0: Deactivated 1: Activated
Logical behavior of area	97	2	UIntegerT	0	RW	0: Normal - light switching 1: Inverted - dark switching
Start beam of area	97	3	UIntegerT	1	RW	(1 ... 1776)
End beam of area	97	4	UIntegerT	1	RW	(1 ... 1776)
Number of beams for area ON	97	5	UIntegerT	0	RW	(0 ... 1776)
Number of beams for area OFF	97	6	UIntegerT	0	RW	(0 ... 1776)
PD Beamstream	100	0	ArrayT		R	8 Bytes
	100	0	UIntegerT		R	
PD Beamstream	101	0	ArrayT		R	16 Bytes
	101	0	UIntegerT		R	
PD Beamstream	102	0	ArrayT		R	32 Bytes
	102	0	UIntegerT		R	
PD Beamstream	103	0	ArrayT		R	64 Bytes
	103	0	UIntegerT		R	
PD Beamstream	104	0	ArrayT		R	128 Bytes
	104	0	UIntegerT		R	
PD Beamstream	105	0	ArrayT		R	222 Bytes
	105	0	UIntegerT		R	
Beamstream Mask	106	0	ArrayT		R	222 Bytes
	106	0	UIntegerT		R	

9 Technical specifications

9.1 General data

Tab. 9.1: Sensor and IODD version

IODD version	V1.2
IODD release date	2016-1-22
Device family	Light Curtain
Device ID	4129
Device name	CSL710 [2 Bytes and COM2]
Device variants	CSL710 [2 Bytes and COM2] (CSL710)