Version: V1.3.3.406671 Release Date: 2015-07-20

Copyright 2015, Builder: 2.5.1.2, Time: 04:08:24

LR

Vendor ID 310 / 0x0136 - Bytes: 01 54 / 0x01 0x36

Vendor Name ifm electronic gmbh

Vendor Text www.ifm.com

Vendor URL http://www.ifm.com/ifmgb/web/io-link-download.htm Device ID 478 / 0x0001DE - Bytes: 00 01 222 / 0x00 0x01 0xDE



Communication

IO-Link Revision V1.1
Bitrate COM2
Minimum Cycle Time 2.300 ms

SIO Mode Supported Yes

Features

Block parametrization Yes Data storage Yes

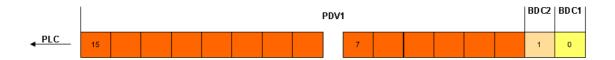
Device Variant

| LR2750 | Electronic level sensor, 101970 mm, IO-Link, cULus, EHEDG, FDA, KTW, Aseptoflex-Vario G1 A | 2 () 4 | |
|--------|--|--|--|
| | | 3 1 BN L+ 2 WH OUT2 4 BK OUT1 | |

Page 1

Process Data Process Data Input Total BitLength = 16

| Name | Description | Datatype | Bitoffset | Bitlength | Value Range | Gradient | Offset | Unit |
|-------|-------------------------|----------|-----------|-----------|----------------|----------|--------|------|
| Level | Current level | IntegerT | 2 | 14 | 10 to 1970 | 1 | 0 | mm |
| | | | | | (8189) FULL | | | |
| | | | | | (0) EPTY | | | |
| | | | | | (8188) SEnS | | | |
| | | | | | (8190) Err | | | |
| OUT2 | Status depends on [OU2] | BooleanT | 1 | | false inactive | | | |
| | | | | | true active | | | |
| | | | | | | | | |
| OUT1 | Status depends on [OU1] | BooleanT | 0 | | false inactive | | | |
| | | | | | true active | | | |
| | | | | | | | | |



| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|----------------------|-------------|-------|--------------------|-----------|--------|------------------|---------|---|----------|--------|------|
| Standard Command | | 2 | Sub 0 | UIntegerT | 8 Bit | wo | | | | | |
| | | | | | | | | (130) Restore Factory Settings | | | |
| | | | | | | | | (176) Start simulation | 1 | | |
| | | | | | | | | (177) Stop simulation | 1 | | |
| | | | | | | | | (208) TEACH_TANK_REF | | | |
| | | | | | | | | (240) IO-Link 1.1 system test command 240, Event 8DFE appears | | | |
| | | | | | | | | (241) IO-Link 1.1 system test command 241, Event 8DFE disappears | | | |
| | | | | | | | | (242) IO-Link 1.1 system test command 242, Event 8DFF appears | | | |
| | | | | | | | | (243) IO-Link 1.1 system test command 243, Event 8DFF disappears | | | |
| | | | | | | | | (255) Command without effect, for internal use only | | | |
| Device Access Locks | | 12 | Sub 0 | RecordT | 16 Bit | rw | | | | | |
| Data Storage | | | bitOffs 1 | BooleanT | 1 Bit | | (false) | false Unlocked | | | |
| | | | | | | | | true Locked | | | |
| Local User Interface | | | bitOffs 3 | BooleanT | 1 Bit | | (false) | false Unlocked | | | |
| | | | | | | | | true Locked | | | |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|--------------------------|-------------|-------|--------------------|-----------|----------------|------------------|-------------------------|--|----------|--------|------|
| Vendor Name | | 16 | Sub 0 | | max 19 Byte | ro | ifm electronic gmbh | | | | |
| Vendor Text | | 17 | Sub 0 | | max 11 Byte | ro | www.ifm.com | | | | |
| Product Name | | 18 | Sub 0 | | max 6 Byte | ro | LR2750 | | | | |
| Product ID | | 19 | Sub 0 | | max 6 Byte | ro | LR2750 | | | | |
| Product Text | | 20 | Sub 0 | | max 23 Byte | ro | Electronic level sensor | | | | |
| Serial Number | | 21 | Sub 0 | | max 12 Byte | ro | | | | | |
| Hardware Version | | 22 | Sub 0 | | max 2 Byte | ro | | | | | |
| Firmware Version | | 23 | Sub 0 | | max 5 Byte | ro | | | | | |
| Application Specific Tag | ; | 24 | Sub 0 | | max 32 Byte | rw | *** | | | | |
| Device Status | | 36 | Sub 0 | UIntegerT | 8 Bit | ro | (0) Device is OK | (0) Device is OK (1) Maintenance required (2) Out of specification (3) Functional chec (4) Failure 5 to 255 (Reserved) | | | |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|-----------------------|--|-------|--------------------|-----------|---------|------------------|------------|-------------|----------|--------|------|
| Detailed Devic | e Status | 37 | Sub 0 | | 33 Byte | ro | 00 00 00 h | | | | |
| P-n | Output polarity for the switching outputs | 500 | Sub 0 | UIntegerT | 8 Bit | rw | (0) PnP | | | | |
| | | | | | | | | (0) PnP | | | |
| | | | | | | | | (1) nPn | | | |
| dAP | Damping of the measured signal | 510 | Sub 0 | UIntegerT | 16 Bit | rw | 0 | 0 to 600 | 0.1 | 0 | s |
| dFo | Delay time of outputs after fault | 530 | Sub 0 | UIntegerT | 16 Bit | rw | 30 | 0 to 100 | 0.1 | 0 | s |
| FOU1 | [OUT 1] behaviour in case of fault | 531 | Sub 0 | UIntegerT | 8 Bit | rw | (4) OFF | | | | |
| | | | | | | | | (2) On | | | |
| | | | | | | | | (4) OFF | | | |
| FOU2 | [OUT 2] behaviour in case of fault | 532 | Sub 0 | UIntegerT | 8 Bit | rw | (4) OFF | | | | |
| | | | | | | | | (2) On | | | |
| | | | | | | | | (4) OFF | | | |
| Loc | [Loc] locks the local user interface to prevent unintentional changes, [Loc] is resettable at the device | 550 | Sub 0 | UIntegerT | 8 Bit | rw | (1) uLoc | | | | |
| | | | | | | | | (0) Loc | | | |
| | | | | | | | | (1) uLoc | | | |
| uni | Selection of unit on the sensor display | 551 | Sub 0 | UIntegerT | 8 Bit | rw | (0) mm | | | | |
| | | | | | | | | (0) mm | | | |
| | | | | | | | | (1) inch | | | |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|----------------------|--|-------|--------------------|-----------|--------|------------------|------------|--|----------|--------|------|
| SELd | Selection of measurement on the sensor display | 553 | Sub 0 | RecordT | 16 Bit | rw | | | | | |
| Display On / OFF | | | bitOffs 15 | BooleanT | 1 Bit | | (false) On | (false) On (true) OFF | | | |
| Displayed measuremen | nt | | bitOffs 0 | UIntegerT | 15 Bit | | (1) L | 1 L 2 % | | | |
| S.On | Simulation state | 570 | Sub 0 | UIntegerT | 8 Bit | ro | (0) OFF | (0) OFF (1) On | | | |
| S.Tim | Simulation duration | 571 | Sub 0 | UIntegerT | 8 Bit | rw | (2) 3 min | (0) 1 min (1) 2 min (2) 3 min (3) 4 min (4) 5 min (5) 10 min (6) 15 min (7) 20 min (8) 30 min (9) 45 min (10) 60 min | | | |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|--------|---|-------|--------------------|-----------|--------|------------------|--|--|----------|--------|------|
| S.LvL | Simulation of level. The maximum [S.LvL] can be [LEnG] minus 30 mm | 572 | Sub 0 | IntegerT | 16 Bit | rw | (75) | | 1 | 0 | mm |
| | | | | | | | | 10 to 1970 | | | |
| | | | | | | | | (8189) FULL | | | |
| | | | | | | | | (8188) SEnS | | | |
| | | | | | | | | (8190) Err | | | |
| | | | | | | | | (0) EPTY | | | |
| ou1 | Output configuration [OUT 1] | 580 | Sub 0 | UIntegerT | 8 Bit | rw | (3) Hno / Hysteresis fct normally open | | | | |
| | | | | | | | | (3) Hno / Hysteresis fct normally open | | | |
| | | | | | | | | (4) Hnc / Hysteresis fct normally closed | | | |
| | | | | | | | | (5) Fno / Window fct normally open | | | |
| | | | | | | | | (6) Fnc / Window fct normally closed | | | |
| dS1 | Switching delay for [OUT 1] | 581 | Sub 0 | UIntegerT | 16 Bit | rw | 0 | 0 to 600 | 0.1 | 0 | s |
| dr1 | Reset delay for [OUT 1] | 582 | Sub 0 | UIntegerT | 16 Bit | rw | 0 | 0 to 600 | 0.1 | 0 | s |
| SP_FH1 | Switch point 1 from bottom edge of probe, [SP1] must be greater than [rP1]. Please take into account the current [rP1] value. [SP1] will be refused if below [rP1]. The maximum [SP1] can be [LEnG] minus 30 mm | | Sub 0 | IntegerT | 16 Bit | rw | 60 | 15 to 1970 | 1 | 0 | mm |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|--------|---|-------|--------------------|-----------|--------|------------------|---------------------------------|--|----------|--------|------|
| rP_FL1 | Reset point 1 from bottom edge of probe, [rP1] must be smaller than [SP1]. Please take into account the current [SP1] value. [rP1] will be refused if above [SP1]. The maximum [rP1] can be [LEnG] minus 35 mm | | Sub 0 | IntegerT | 16 Bit | rw | 55 | 10 to 1965 | 1 | 0 | mm |
| ou2 | Output configuration [OUT 2] | 590 | Sub 0 | UIntegerT | 8 Bit | rw | (1) I / Analog signal 420 mA | | | | |
| | | | | | | | | (3) Hno / Hysteresis fct normally open | | | |
| | | | | | | | | (4) Hnc / Hysteresis fct normally closed | | | |
| | | | | | | | | (5) Fno / Window fct normally open | | | |
| | | | | | | | | (6) Fnc / Window fct normally closed | | | |
| | | | | | | | | (1) I / Analog signal 420 mA | | | |
| | | | | | | | | (10) InEG / Analog signal 204 mA | | | |
| dS2 | Switching delay for [OUT 2] | 591 | Sub 0 | UIntegerT | 16 Bit | rw | 0 | 0 to 600 | 0.1 | 0 | s |
| dr2 | Reset delay for [OUT 2] | 592 | Sub 0 | UIntegerT | 16 Bit | rw | 0 | 0 to 600 | 0.1 | 0 | s |
| SP_FH2 | Switch point 2 from bottom edge of probe, [SP2] must be greater than [rP2]. Please take into account the current [rP2] value. [SP2] will be refused if below [rP2]. The maximum [SP2] can be [LEnG] minus 30 mm | | Sub 0 | IntegerT | 16 Bit | rw | 120 | 15 to 1970 | 1 | 0 | mm |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|--------|---|-------|--------------------|-----------|--------|------------------|----------|----------------------------|----------|--------|------|
| rP_FL2 | Reset point 2 from bottom edge of probe, [rP2] must be smaller than [SP2]. Please take into account the current [SP2] value. [rP2] will be refused if above [SP2]. The maximum [rP2] can be [LEnG] minus 35 mm | | Sub 0 | IntegerT | 16 Bit | rw | 115 | 10 to 1965 | 1 | 0 | mm |
| ASP2 | Analogue start point 2 from the lower edge of the probe, [ASP2] must be at least 20% smaller than [AEP2]. For further information please see the operating instructions. | 630 | Sub 0 | IntegerT | 16 Bit | rw | 0 | 0 to 1576 | 1 | 0 | mm |
| AEP2 | Analogue end point 2 from the lower edge of the probe, [AEP2] must be at least 20% greater than [ASP2].[AEP2] can be maximum [LEnG] minus 30 mm. For further information please see the operating instructions. | 631 | Sub 0 | IntegerT | 16 Bit | rw | 120 | 24 to 1970 | 1 | 0 | mm |
| MEdI | Medium selection | 682 | Sub 0 | UIntegerT | 8 Bit | rw | (1) MId | (0) HIGH (1) MId | | | |
| LEnG | Entering the probe length | 1600 | Sub 0 | IntegerT | 16 Bit | rw | 150 | 150 to 2000 | 1 | 0 | mm |
| tREF | Tank reference accomplished | 1603 | Sub 0 | IntegerT | 16 Bit | ro | (0) nonE | 10 to 1750 (0) nonE | 1 | 0 | mm |

| Name | Description | Index | Subindex bitOffset | DataType | Length | Access Rights | Default | Value Range | Gradient | Offset | Unit |
|---------|--|-------|--------------------|----------|--------|------------------|---------|-------------|----------|--------|------|
| RefDist | Distance measured from process connector to be taught by command TEACH_TANK_REF. [RefDist] shall always be smaller then [LEnG] minus 250 mm | | Sub 0 | IntegerT | 16 Bit | rw | 10 | 10 to 1750 | 1 | 0 | mm |

Events

| Code | Name | Туре | Description |
|-------------------|----------------------------------|---------|---|
| 20480 d / 50 00 h | Device hardware fault | Error | Device Exchange |
| 25376 d / 63 20 h | Parameter error | Error | Check data sheet and values |
| 25377 d / 63 21 h | Parameter missing | Error | Check data sheet |
| 30480 d / 77 10 h | Short circuit | Error | Check installation |
| 35856 d / 8C 10 h | Process variable range over-run | Warning | Process data uncertain |
| 35888 d / 8C 30 h | Process variable range under-run | Warning | Process data uncertain |
| 35841 d / 8C 01 h | Simulation active | Warning | Check operational mode |
| 36026 d / 8C BA h | Probe dropped | Error | Solve problem |
| 36028 d / 8C BC h | No reflexion signal | Error | Probe wrongly adjusted |
| 36350 d / 8D FE h | Test Event 1 | Warning | Event appears by setting index 2 to value 240, Event disappears by setting index 2 to value 241 |
| 36351 d / 8D FF h | Test Event 2 | Warning | Event appears by setting index 2 to value 242, Event disappears by setting index 2 to value 243 |