

# IO-Link Parameter Datasheet

## RFID read/write devices

## IUT-F191-IO-V1-FR2-07

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DOCT-8694A - Version 1.01.000 / 2026-01-09

## General Information

| Device Identification | |
|---|---|
| Vendor ID | 1 (0x0001) |
| Device ID | 4194823 (0x400207) |

| Features | |
|---|---|
| Data Storage | Yes |
| Block Parameterization | Yes |

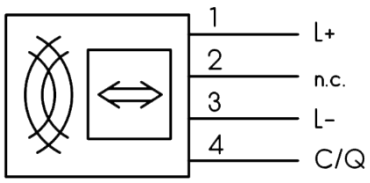
| Communication Characteristics | |
|---|---|
| IO-Link revision | V1.1 (specification V1.1.5) |
| IO-Link backward compatibility | n/a |
| Data transmission rate | COM3 (230.4 kbit/s) |
| Min. cycle time | 4.0 ms |
| Process data input | 32 byte |
| Process data output | 32 byte |
| SIO mode support | no |
| Compatible master port type | Class A, Class B |

| Profile | |
|---|---|
| Identification and Diagnosis - I&D | 16384 (0x4000) |
| Function Class – Locator | 33025 (0x8101) |
| Function Class – Product URI | 33026 (0x8102) |
| | |
| | |
| | |
| | |
| | |

## Supported Product Variants

| *Product ID* | *Product Name* | *Description* | *Connector* |
|---|---|---|---|
| 70162681 | IUT-F191-IO-V1-FR2-07 | RFID read/write device, housing F191, UHF frequency, Brazil, M12 4-pin | Plug, M12, 4-pin |

## Connection

| *Connection Diagram* | *Description* |
|---|---|
|  | **Plug, M12, 4-pin**<br>1: Brown +24V<br>2: White n.c.<br>3: Blue 0V<br>4: Black C/Q |

## Process Data – Easy Mode

Process Data valid for Operation Mode: “Easy Mode” (Index 64, value 128), see *Parameterization & Configuration – Operation Mode*.

### Process Data Input

| Octet | Bitoffs. | Name | Data type | Length | Value | Unit | Description |
|---|---|---|---|---|---|---|---|
| 4 .. 31 | 0 | Read Data | Octetstr | 28 byte | | | Contains the data of a read operation or an error information. |
| 3 | 224 | Transmission Power | UInteger | 8 bit | | dBm | Indicates the transmission power in dBm at which the tag was identified. |
| 2 | 232 | RSSI | UInteger | 8 bit | 0 .. 100 | % | The RSSI value indicates the signal strength of the tag response in percent. A value of 0 means weak signal and 100 means strong signal. |
| 1 | 240 | Data Length | UInteger | 8 bit | 0 .. 28 | | Indicates the number of bytes that have been read when a read task is active. If an error occurs during the execution of a task, i.e. error has the value 'true', the byte contains the length of the error information. |
| 0 | 248 | Read Valid | Boolean | 1 bit | *0*<br>*1* | | The value 'true' indicates that a read access to tag data has been executed successfully. If several tags are in the detection range at the same time, the successful reading of a further tag is signaled by a positive edge change.<br>*false*<br>*true* |
| | 249 | Write Valid | Boolean | 1 bit | *0*<br>*1* | | The value 'true' indicates that a write access to tag data has been executed successfully. If several tags are in the detection range at the same time, the successful writing of a further tag is signaled by a positive edge change.<br>*false*<br>*true* |
| | 250 | Task Active | Boolean | 1 bit | *0*<br>*1* | | The value 'true' indicates that a read or write task is being executed. As soon as a task is canceled, the value is 'false'.<br>*false*<br>*true* |
| | 251 | Error | Boolean | 1 bit | *0*<br>*1* | | The value 'true' indicates that an error has occurred during a read or write task or that the setting of a parameter is incorrect. At the same time, the process data contains additional error information in form of an error code and an error description.<br>*false*<br>*true* |
| | 252 | Tag Present | Boolean | 1 bit | *0*<br>*1* | | The value 'true' indicates that one or more tags are in the detection range. If there is no tag in the detection range, the value is 'false'.<br>*false*<br>*true* |
| | 253 | Reserved | | 3 bit | | | Reserved |

### Process Data Output

| Octet | Bitoffs. | Name | Data type | Length | Value | Unit | Description |
|---|---|---|---|---|---|---|---|
| 4 .. 31 | 0 | Write Data | Octetstr | 28 byte | | | Contains the data for a write operation. |
| 1 .. 3 | 224 | Reserved | | 3 byte | | | Reserved |
| 0 | 248 | Start Read | Boolean | 1 bit | *0*<br>*1* | | The value 'true' initiates a task to read tag data according to the configuration by the parameters. The read task is executed continuously. Set the value to 'false' to cancel the read task.<br>*false*<br>*true* |
| | 249 | Start Write | Boolean | 1 bit | *0*<br>*1* | | The value 'true' initiates a task to write tag data according to the configuration by the parameters. The write task is executed continuously. Set the value to 'false' to cancel the write task.<br>*false*<br>*true* |
| | 250 | Reserved | | 6 bit | | | Reserved |

NOTE: The process data input content can also be read via parameter ‘Process Data Input’ at index 40 (0x28).
The process data output content can also be read via parameter ‘Process Data Output’ at index 41 (0x29).

## Process Data – Expert Mode

Process Data valid for Operation Mode: “Expert Mode” (Index 64, value 0), see *Parameterization & Configuration – Operation Mode*.

### Process Data Input

| *Octet* | *Bitoffs.* | *Name* | *Data type* | *Length* | *Value* | *Unit* | *Description* |
|---|---|---|---|---|---|---|---|
| 3 .. 31 | 0 | Data | Octetstr | 29 byte | | | Contains the data of a read or write operation. |
| 2 | 232 | Fragmentation Counter | UInteger | 8 bit | | | Shows the remaining number of fragments of the frame to be transmitted. |
| 0 .. 1 | 240 | Frame Length | UInteger | 12 bit | | | Shows the total number of valid bytes inside the current process data frame. |
| | 252 | Reserved | | 1 bit | | | Reserved |
| | 253 | Handshake – UD | Boolean | 1 bit | *0*<br>*1* | | Control bits for realization of the handshake procedure or clearing the device memory.<br>*Handshake bit not set*<br>*Handshake bit set* |
| | 254 | Handshake – UM | Boolean | 1 bit | | | *See Bitoffset 253* |
| | 255 | Handshake – D | Boolean | 1 bit | | | *See Bitoffset 253* |

### Process Data Output

Structure and content are identical to Process Data Input

NOTE: The process data input content can also be read via parameter ‘Process Data Input’ at index 40 (0x28).
The process data output content can also be read via parameter ‘Process Data Output’ at index 41 (0x29).

## Parameter Data

### Identification

| *Index* | *Parameter* | *Access* | *Data type* | *Length* | *Default* | *Description* | *DS* | *R* |
|---|---|---|---|---|---|---|---|---|
| 16 (0x10) | Vendor Name | ro | String | 13 byte | Pepperl+Fuchs | The vendor name that is assigned to a Vendor ID. | | |
| 17 (0x11) | Vendor Text | ro | String | 29 byte | www.pepperl-fuchs.com/io-link | Additional information about the vendor. | | |
| 18 (0x12) | Product Name | ro | String | max. 32 byte | *See table 'Supported Product Variants'* | Complete product name. | | |
| 19 (0x13) | Product ID | ro | String | 8 byte | *See table 'Supported Product Variants'* | Vendor-specific product or type identification (e.g., item number or model number). | | |
| 20 (0x14) | Product Text | ro | String | 22 byte | RFID read/write device | Additional product information for the device. | | |
| 21 (0x15) | Serial Number | ro | String | 14 byte | <serial number> | Unique, vendor-specific identifier of the individual device. | | |
| 22 (0x16) | Hardware Revision | ro | String | 7 byte | HW**.** | Unique, vendor-specific identifier of the hardware revision of the individual device. | | |
| 23 (0x17) | Firmware Revision | ro | String | 7 byte | FW**.** | Unique, vendor-specific identifier of the firmware revision of the individual device. | | |
| 24 (0x18) | Application Specific Tag | rw | String | max. 32 byte | Your automation, our passion. | Possibility to mark a device with user- or application-specific information. | Y | F |
| 25 (0x19) | Function Tag | rw | String | max. 32 byte | *** | Possibility to mark a device with function-specific information. | Y | F |
| 26 (0x1A) | Location Tag | rw | String | max. 32 byte | *** | Possibility to mark a device with location-specific information. | Y | F |
| 27 (0x1B) | Product URI | ro | String | 30 byte | https://pefu.de/<serial number> | Provides a unique instance identification compliant to DIN-SPEC 91406. | | |
| 192 (0xC0) | Installation Tag | rw | String | max. 32 byte | *** | Provides the possibility to mark the device with the installation or initial commissioning data or date. Note: this entry will not be transferred to a new device on replacement. | | F |

| Parameterization & Configuration | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Index .sub*** | ***Parameter*** | ***Access*** | ***Data type*** | ***Length*** | ***Bitoffs.*** | ***Default*** | ***Value*** | ***Unit*** | ***Description*** | ***DS*** | ***R*** |
| 64 (0x40) | Operation Mode | rw | UInteger | 8 bit | | 128 | *0*<br>*128* | | Defines the operation mode with which the RFID read/write device is operated. For standard applications, the Easy Mode is to be preferred.<br>*Expert Mode*<br>*Easy Mode* | Y | FA |
| 65 (0x41) | Read Task | rw | Record | 5 byte | | | | | Easy Mode only: Defines the parameter and memory location for read access to the tag data. | Y | FA |
| .1 | Memory Area | rw | UInteger | 8 bit | 32 | 0 | *0*<br>*64*<br>*128* | | Defines the memory location for read access to the tag data.<br>*UII/EPC + User Memory*<br>*UII/EPC*<br>*UII/EPC + TID* | Y | FA |
| .2 | Number Of Bytes | rw | UInteger | 8 bit | 24 | 8 | 1 .. 28 | | Defines the number of bytes for read access to the user memory of the tag. The value must be a multiple of 4. Maximum length of data is 28 bytes. | Y | FA |
| .3 | Start Address | rw | UInteger | 16 bit | 8 | 0x0000 | 0x0000<br>..<br>0xFFFF | | Defines the start address for read access to the user memory of the tag. The value must be a multiple of 4. | Y | FA |
| .4 | Autostart | rw | UInteger | 8 bit | 0 | 128 | *0*<br>*128* | | Defines whether a read task is started automatically according to the parameter settings. The value must be 'disabled' so that a manual read task (or also write task) can be started via the process data.<br>*Disabled*<br>*Enabled* | Y | FA |
| 66 (0x42) | Write Task | rw | Record | 4 byte | | | | | Easy Mode only: Defines the parameter and memory location for write access to the tag data. | Y | FA |
| .1 | Memory Area | rw | UInteger | 8 bit | 24 | 0 | *0*<br>*32*<br>*64* | | Defines the memory location for write access to the tag data.<br>*User Memory*<br>*UII/EPC (incl. PC)*<br>*EPC (excl. PC)* | Y | FA |
| .2 | Number Of Bytes | rw | UInteger | 8 bit | 16 | 8 | 1 .. 28 | | Defines the number of bytes for write access to the tag data. The value must be a multiple of 4 if user memory is selected and a multiple of 2 if UII/EPC is selected. Maximum length of data is 28 bytes. | Y | FA |
| .3 | Start Address | rw | UInteger | 16 bit | 0 | 0x0000 | 0x0000<br>..<br>0xFFFF | | Defines the start address for write access to the user memory of the tag. The value must be a multiple of 4. | Y | FA |
| 67 (0x43) | Input Representation | rw | UInteger | 8 bit | | 0 | *0*<br>*128* | | Defines the content of the read data. If the long form representation is used, a read access to the user memory or the TID is always preceded by the UII/EPC and additional length information.<br>*Long form*<br>*Short form* | Y | FA |
| 96 (0x60) | Transmission Powers (PT) | rw | Record | 10 byte | | | | | Defines the set of different power levels, which the RFID read/write device will use when accessing a tag. This allows to define a ramp for a continuous increase of the transmission power. | Y | FA |

| Parameterization & Configuration | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Index .sub** | **Parameter** | **Access** | **Data type** | **Length** | **Bitoffs.** | **Default** | **Value** | **Unit** | **Description** | **DS** | **R** |
| .1 | Power 1 | rw | UInteger | 16 bit | 64 | 150 | *3*<br>*4*<br>*5*<br>*6*<br>*8*<br>*10*<br>*13*<br>*15*<br>*20*<br>*25*<br>*30*<br>*40*<br>*50*<br>*60*<br>*80*<br>*100*<br>*125*<br>*150* | mW | Defines the transmission power, which the RFID read/write device will use when accessing a tag.<br>*3 mW (5 dBm)*<br>*4 mW (6 dBm)*<br>*5 mW (7 dBm)*<br>*6 mW (8 dBm)*<br>*8 mW (9 dBm)*<br>*10 mW (10 dBm)*<br>*13 mW (11 dBm)*<br>*15 mW (12 dBm)*<br>*20 mW (13 dBm)*<br>*25 mW (14 dBm)*<br>*30 mW (15 dBm)*<br>*40 mW (16 dBm)*<br>*50 mW (17 dBm)*<br>*60 mW (18 dBm)*<br>*80 mW (19 dBm)*<br>*100 mW (20 dBm)*<br>*125 mW (21 dBm)*<br>*150 mW (22 dBm)* | Y | FA |
| .2 | Power 2 | rw | UInteger | 16 bit | 48 | 0 | *0*<br>*3*<br>*4*<br>*5*<br>*6*<br>*8*<br>*10*<br>*13*<br>*15*<br>*20*<br>*25*<br>*30*<br>*40*<br>*50*<br>*60*<br>*80*<br>*100*<br>*125*<br>*150* | mW | Defines the transmission power, which the RFID read/write device will use when accessing a tag.<br>*Disabled*<br>*3 mW (5 dBm)*<br>*4 mW (6 dBm)*<br>*5 mW (7 dBm)*<br>*6 mW (8 dBm)*<br>*8 mW (9 dBm)*<br>*10 mW (10 dBm)*<br>*13 mW (11 dBm)*<br>*15 mW (12 dBm)*<br>*20 mW (13 dBm)*<br>*25 mW (14 dBm)*<br>*30 mW (15 dBm)*<br>*40 mW (16 dBm)*<br>*50 mW (17 dBm)*<br>*60 mW (18 dBm)*<br>*80 mW (19 dBm)*<br>*100 mW (20 dBm)*<br>*125 mW (21 dBm)*<br>*150 mW (22 dBm)* | Y | FA |
| .3 | Power 3 | rw | UInteger | 16 bit | 32 | 0 | | mW | See subindex 2. | Y | FA |
| .4 | Power 4 | rw | UInteger | 16 bit | 16 | 0 | | mW | See subindex 2. | Y | FA |
| .5 | Power 5 | rw | UInteger | 16 bit | 0 | 0 | | mW | See subindex 2. | Y | FA |
| 97 (0x61) | Number Of Tags To Find (NT) | rw | UInteger | 8 bit | | 255 | *255*<br>*1 .. 20* | | Expert Mode only: Defines the number of tags that are searched for in the detection range. If the number of found tags reaches or exceeds the value, the current command is terminated and the data is output. This parameter has no effect on 'Enhanced' commands.<br>*Off*<br>*Number Of Tags To Find* | Y | FA |
| 98 (0x62) | Tries Allowed (TA) | rw | UInteger | 8 bit | | 2 | 1 .. 10 | | Defines the number of access attempts during the execution of a read/write operation to a tag. | Y | FA |
| 99 (0x63) | Expected Number Of Tags (QW) | rw | UInteger | 8 bit | | 2 | *0*<br>*1*<br>*2*<br>*3*<br>*4* | | Defines the number of tags, which are expected in the detection range. This setting affects the time slot when communicating with a tag to avoid collisions caused by simultaneous communication of several tags.<br>*exactly 1 Tag*<br>*approx. 2 Tags*<br>*approx. 4 Tags*<br>*approx. 8 Tags*<br>*approx. 16 Tags* | Y | FA |
| 100 (0x64) | Tag Lost Smoothing (E5) | rw | UInteger | 8 bit | | 5 | 0 .. 10 | | Defines the number of unsuccessful read/write attempts before the device signals that a | Y | FA |

| Parameterization & Configuration | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Index .sub*** | ***Parameter*** | ***Access*** | ***Data type*** | ***Length*** | ***Bitoffs.*** | ***Default*** | ***Value*** | ***Unit*** | ***Description*** | ***DS*** | ***R*** |
| | | | | | | | | | tag has left the detection range or could no longer be identified. This parameter has no effect on 'Single' commands. | | |
| 104 (0x68) | Number of Channels (NC) | rw | UInteger | 8 bit | | 4 | 1 .. 52 | | Defines the number of transmission channels with which a single read or write attempt is made. | Y | FA |

NOTE: The parameter data provide the attributes DS (Data Storage) and R (Reset behavior). The following rules apply:
DS: Parameters marked with 'Y' (yes) are exchanged with the master via the data storage mechanism.
R: Parameters marked with 'F' are reset to the factory default value upon reception of the command 'Back-to-box'.
Parameters marked with 'A' are reset to the factory default value upon reception of the command 'Application Reset'.

| Diagnosis | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Index .sub*** | ***Parameter*** | ***Access*** | ***Data type*** | ***Length*** | ***Bitoffs.*** | ***Value*** | ***Unit*** | ***Description*** |
| 36 (0x24) | Device Status | ro | UInteger | 8 bit | | *0<br>1<br>2<br>3<br>4* | | Indicator for the current device condition and diagnosis state.<br>*Device is OK<br>Maintenance required<br>Out of specification<br>Functional check<br>Failure* |
| 37 (0x25) | Detailed Device Status | ro | Array [S0] | 15 byte | | | | List of all currently pending events in the device. |
| .1 | Element 1 | | Octetstr | 3 byte | 96 | | | |
| .2 | Element 2 | | Octetstr | 3 byte | 72 | | | |
| .3 | Element 3 | | Octetstr | 3 byte | 48 | | | |
| .4 | Element 4 | | Octetstr | 3 byte | 24 | | | |
| .5 | Element 5 | | Octetstr | 3 byte | 0 | | | |
| 176 (0xB0) | Device Characteristics | ro | Record [S0] | 3 byte | | | | Shows relevant key characteristics of the device for use in applications. |
| .1 | Region Code | ro | UInteger | 8 bit | 16 | | | Shows the code for the region, where operation of the device according to certifications is permitted. |
| .3 | Supply Current Requirement | ro | UInteger | 16 bit | 0 | | mA | Shows the maximum specified supply current for the device excluding load. |
| 224 (0xE0) | Operating Hours | ro | UInteger | 32 bit | | 0 .. $2^{32}$-1 | h | Shows the overall hours of operation since initial commissioning. |
| 225 (0xE1) | Temperature Indicator | ro | UInteger | 8 bit | | *0<br>1<br>2<br>3<br>4* | | Indicates the operation at ambient temperatures close to or in excess of specification limits.<br>*Operating condition OK<br>Close to upper limit<br>Upper limit exceeded<br>Close to lower limit<br>Lower limit exceeded* |
| 226 (0xE2) | Temperature Monitor | ro | Record [S0] | 9 byte | | | | Contains parameters showing current and past conditions of temperature exposure since initial commissioning. |
| .1 | Overtemperature Operating Hours | ro | UInteger | 32 bit | 40 | 0 .. $2^{32}$-1 | h | Shows the overall hours of powered operation above the specified temperature limit since initial commissioning. |
| .2 | Overtemperature Exceeded Counter | ro | UInteger | 16 bit | 24 | 0 .. 65535 | | Shows the number of transitions to operating temperatures above the specified limit in powered operation since initial commissioning. |
| .3 | Maximum Operating Temperature | ro | Integer | 8 bit | 16 | -40 .. 125 | °C | Shows the maximum observed temperature in powered operation since initial commissioning. |
| .4 | Minimum Operating Temperature | ro | Integer | 8 bit | 8 | -40 .. 125 | °C | Shows the minimum observed temperature in powered operation since initial commissioning. |
| .5 | Device Operating Temperature | ro | Integer | 8 bit | 0 | -40 .. 125 | °C | Shows the currently observed operating temperature of the device. |
| 227 (0xE3) | Power Monitor | ro | Record [S0] | 16 byte | | | | Contains parameters showing the power cycle and uptime statistics since initial commissioning. |
| .1 | Power Cycle Count | ro | UInteger | 32 bit | 96 | | | Shows the number of power cycles since initial commissioning. |
| .2 | Maximum Uptime | ro | UInteger | 32 bit | 64 | | s | Shows the maximum observed powered operating time between power cycles in seconds since initial commissioning. |
| .3 | Average Uptime | ro | UInteger | 32 bit | 32 | | s | Shows the average observed powered operating time between power cycles in seconds since initial commissioning. |
| .4 | Uptime | ro | UInteger | 32 bit | 0 | | s | Shows the current operating time since the last power cycle in seconds. |

| Observation | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Index .sub** | **Parameter** | **Access** | **Data type** | **Length** | **Bitoffs.** | **Value** | **Unit** | **Description** |
| 36 (0x24) | Device Status | ro | UInteger | 8 bit | | | | Indicator for the current device condition and diagnosis state.<br>*See Diagnosis – Device Status.* |
| 40 (0x28) | PD Input | ro | Record [S0] | 32 byte | | | | Last valid process input data of the device.<br>*See Process Data Input.* |
| 41 (0x29) | PD Output | ro | Record [S0] | 32 byte | | | | Last valid process output data written to the device.<br>*See Process Data Output.* |
| 64 (0x40) | Operation Mode | ro | UInteger | 8 bit | | | | Indicator for the current operation mode of the device.<br>*See Parameterization & Configuration – Operation Mode.* |

NOTE: Parameters with datatype Record or Array, which are marked with 'S0' can only be accessed via subindex 0 (whole parameter object). Subindex access to single items is not possible.

## Command Interface

| *Index* | *Parameter* | *Access* | *Data type* | *Length* | *Value* | *Description* |
|---|---|---|---|---|---|---|
| 2 (0x02) | System Command | wo | UInteger | 8 bit | See command value | Command interface for applications. A positive acknowledge indicates the complete and correct finalization of the requested function. |

| *Command Value* | *Command* | *Description* |
|---|---|---|
| 126 (0x7E) | Locator Start | Starts the Locator indication (double flashing every second) with all green and yellow LEDs. |
| 127 (0x7F) | Locator Stop | Stops the Locator indication. |
| 129 (0x81) | Application Reset | The parameters of the technology-specific application are set to default values. Identification parameters remain unchanged. An upload to the data storage of the master will be executed, if activated in the port configuration of the master. |
| 131 (0x83) | Back-to-box | The parameters of the device are set to factory default values and communication will be inhibited until the next power cycle. Note: Directly detach the device from the master port! |

## Error Codes

| *Code* | *Additional code* | *Name* | *Description* |
|---|---|---|---|
| 128 (0x80) | 17 (0x11) | Index not available | Read or write access attempt to a non-existing index. |
| 128 (0x80) | 18 (0x12) | Subindex not available | Read or write access attempt to a non-existing subindex of an existing index. |
| 128 (0x80) | 32 (0x20) | Service temporarily not available | Parameter not accessible due to the current state of the technology-specific application. |
| 128 (0x80) | 33 (0x21) | Service temporarily not available - local control | Parameter not accessible. The device is currently in an ongoing, locally controlled operation. |
| 128 (0x80) | 34 (0x22) | Service temporarily not available - device control | Parameter not accessible. The technology-specific application is currently in a remotely triggered operation. |
| 128 (0x80) | 35 (0x23) | Access denied | Write access to a read-only parameter or read access to write-only parameter. |
| 128 (0x80) | 48 (0x30) | Parameter value out of range | Written parameter value is outside of the permitted value range. |
| 128 (0x80) | 49 (0x31) | Parameter value above limit | Written parameter value is above its specified value range. |
| 128 (0x80) | 50 (0x32) | Parameter value below limit | Written parameter value is below its specified value range. |
| 128 (0x80) | 51 (0x33) | Parameter length overrun | Written parameter is longer than specified. |
| 128 (0x80) | 52 (0x34) | Parameter length underrun | Written parameter is shorter than specified. |
| 128 (0x80) | 53 (0x35) | Function not available | Written command is not supported by the technology-specific application. |
| 128 (0x80) | 54 (0x36) | Function temporarily unavailable | Written command is unavailable due to the current state of the technology-specific application. |
| 128 (0x80) | 64 (0x40) | Invalid parameter set | Written single parameter value collides with other existing parameter settings. |
| 128 (0x80) | 65 (0x41) | Inconsistent parameter set | Parameter set inconsistencies at the end of block parameter transfer. Device plausibility check failed. |
| 129 (0x81) | 1 (0x01) | Transmission channels must be unique | It is not allowed to select the same channel more than once. |

## Event Codes

| *Code* | *Type* | *Name* | *Description* |
|---|---|---|---|
| 20480 (0x5000) | Error | Hardware error. | Device hardware fault – Device exchange |
| 36163 (0x8D43) | Warning | Ambient temperature outside specified temperature range. | Check sensor environment for heat sources. |
| 36176 (0x8D50) | Warning | Data buffer overflow. | An overflow of data in the buffer occurs due to excess of targets in range. Check or remove targets in range. |
| 36177 (0x8D51) | Warning | Parser error. | An error occurs while parsing the data, some telegrams might be missing. |
| 36304 (0x8DD0) | Error | Software error. | An assertion occurs in the RFID part. |