



## Control IO-Link Master

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# Changing IO-Link Device Parameters Using the IO-Link Device – Port Table

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## Tech Tip

*This document provides an example of how to use the **IO-Link Device – Port** table to edit IO-Link device parameters after loading an IODD file. In addition, this shows how reset the IO-Link device to default factory settings.*

# Changing IO-Link Device Parameters (IO-Link Device – Port Table)

You must load the associated IODD file for an IO-Link device before you can use the IO-Link Device – Port table to change parameter values. If necessary, refer to the [Loading IODD Files Application Note](#). Optionally, you can use the [IO-Link Device ISDU Interface](#) to change parameters (refer to [Configuring IO-Link Devices Using the IO-Link Device ISDU Interface](#)).

Use the following procedure to change parameter values using the **IO-Link Device – Port** table.

1. Click **Attached Devices | Port 3** (in this example). The IO-Link device displays as expected in the **PORT** page.

The screenshot shows the 'IO-Link Device - Port 3' configuration page. At the top, there is a navigation bar with 'Attached Devices' selected. Below it, a breadcrumb trail shows 'PORT 3'. The main content area features the SICK logo and a table of parameters. A red box highlights the 'EDIT' button in the top right corner of the table area, with a red text overlay that reads 'Click the EDIT button to make parameter changes'. The table is divided into two sections: '- Identification' and '- Parameter Menu'.

| Parameter Name           | Index | Subindex | Value            | R/W | Unit | Min | Max   | Comments              | Gr |
|--------------------------|-------|----------|------------------|-----|------|-----|-------|-----------------------|----|
| <b>- Identification</b>  |       |          |                  |     |      |     |       |                       |    |
| Vendor Name              | 16    |          | SICK AG          | RO  |      |     |       |                       |    |
| Product Name             | 18    |          | OPR20G-RB317537  | RO  |      |     |       |                       |    |
| Serial Number            | 21    |          | 15080029         | RO  |      |     |       |                       |    |
| Hardware Version         | 22    |          | 1.00             | RO  |      |     |       |                       |    |
| Firmware Version         | 23    |          | V1.00.001.963    | RO  |      |     |       |                       |    |
| Application Specific Tag | 24    |          | *****            | RW  |      |     |       |                       |    |
| Device Specific Tag      | 64    |          | *****            | RW  |      |     |       |                       |    |
| SICK-Profile Version     | 205   |          | 0.02             | RO  |      |     |       |                       |    |
| <b>- Parameter Menu</b>  |       |          |                  |     |      |     |       |                       |    |
| Pin 5 Configuration      | 122   |          | 17               | RW  |      | 0   | 18    | value range:0;17;18   |    |
| Find Me                  | 204   |          | 0                | RW  |      | 0   | 16    | value range:0;1;16    |    |
| Delay Mode Q1            | 212   |          | 0                | RW  |      | 0   | 3     | value range:0;1;2;3   |    |
| Delay Mode Q2            | 213   |          | 0                | RW  |      | 0   | 3     | value range:0;1;2;3   |    |
| Delay Time Q1            | 214   |          | 0                | RW  |      | 0   | 30000 | value range:0-30000   |    |
| Delay Time Q2            | 215   |          | 0                | RW  |      | 0   | 30000 | value range:0-30000   |    |
| Quality of Run Alarm     | 226   |          | 0                | RW  |      | 0   | 100   | value range:0-100     |    |
| Device Access Locks      | 12    |          | 0<br>0<br>0<br>0 | RW  |      |     |       |                       |    |
| Device Mode              | 65    |          | 0                | RW  |      | 0   | 129   | value range:0;128;129 |    |

At the bottom of the page, there is a footer with 'Welcome Admin' on the left and '© Copyright Comtrol Corp.' on the right.

2. Notice that you can expand or collapse parameter groups to customize your view.

The screenshot shows the 'IO-Link Device - Port 3' interface. At the top, there is a navigation bar with 'CONTROL' and tabs for 'Home', 'Diagnostics', 'Configuration', and 'Advanced'. Below this is a menu for 'Attached Devices' and 'Help', along with 'IO-Link Master DR-8-EIP' and 'Logout'. A secondary menu shows 'IODD FILES' and 'SUMMARY' followed by 'PORT 1' through 'PORT 8'. The main content area is titled 'IO-Link Device - Port 3' and includes a 'SICK' logo and 'REFRESH' and 'EDIT' buttons. A table of parameters is displayed with the following columns: Parameter Name, Index, Subindex, Value, R/W, Unit, Min, Max, and Comments. A red box highlights the first row, which has a dropdown menu with 'Identification' and 'Parameter Menu' options. A red text overlay reads 'Expand or collapse parameter groups to customize your view'. The table contains 18 rows of parameters, including 'Pin 5 Configuration', 'Find Me', 'Delay Mode Q1', 'Delay Mode Q2', 'Delay Time Q1', 'Delay Time Q2', 'Quality of Run Alarm', 'Device Access Locks', 'Device Mode', 'Teach-in Channel', 'Setpoint (BDC1 / Q1)', 'Switchpoint (BDC1 / Q1)', 'Setpoint (BDC2 / Q2)', 'Switchpoint (BDC2 / Q2)', 'Key Lock', and 'Standard Command'. The footer shows 'Welcome Admin' and '© Copyright Control Corp.'.

| Parameter Name          | Index | Subindex | Value             | R/W | Unit | Min | Max   | Comments              |
|-------------------------|-------|----------|-------------------|-----|------|-----|-------|-----------------------|
| Pin 5 Configuration     | 122   |          | 18                | RW  |      | 0   | 18    | value range:0;17;18   |
| Find Me                 | 204   |          | 0                 | RW  |      | 0   | 16    | value range:0;1;16    |
| Delay Mode Q1           | 212   |          | 1                 | RW  |      | 0   | 3     | value range:0;1;2;3   |
| Delay Mode Q2           | 213   |          | 0                 | RW  |      | 0   | 3     | value range:0;1;2;3   |
| Delay Time Q1           | 214   |          | 1500              | RW  |      | 0   | 30000 | value range:0-30000   |
| Delay Time Q2           | 215   |          | 2000              | RW  |      | 0   | 30000 | value range:0-30000   |
| Quality of Run Alarm    | 226   |          | 0                 | RW  |      | 0   | 100   | value range:0-100     |
| Device Access Locks     | 12    |          | 0<br>0<br>0<br>0  | RW  |      |     |       |                       |
| Device Mode             | 65    |          | 0                 | RW  |      | 0   | 129   | value range:0;128;129 |
| Teach-in Channel        | 58    |          | 0                 | RW  |      | 0   | 0     | value range:0         |
| Setpoint (BDC1 / Q1)    | 60    |          | 2<br>0            | RW  |      |     |       |                       |
| Switchpoint (BDC1 / Q1) | 61    |          | 0<br>1<br>0       | RW  |      |     |       |                       |
| Setpoint (BDC2 / Q2)    | 62    |          | 0<br>0            | RW  |      |     |       |                       |
| Switchpoint (BDC2 / Q2) | 63    |          | 0<br>1<br>0       | RW  |      |     |       |                       |
| Key Lock                | 81    |          | 1                 | RW  |      | 0   | 1     | value range:0;1       |
| Standard Command        | 2     |          | 1-Point Teach-... | WO  |      | 65  | 65    | value range:65        |

3. Click the **EDIT** button, change the parameters as required, and then click **SAVE**.

The screenshot displays the 'IO-Link Device - Port 3' configuration page. At the top, there is a navigation bar with 'CONTROL' logo and tabs for 'Home', 'Diagnostics', 'Configuration', and 'Advanced'. Below this is a sub-navigation bar for 'PORT 1' through 'PORT 8', with 'PORT 3' selected. The main content area features a table of parameters for a SICK IO-Link device. A red box highlights the 'SAVE' button in the top right corner. The table includes the following parameters:

| Parameter Name           | ID  | Value  | Access | Min | Max   | Value Range           |
|--------------------------|-----|--|--------|-----|-------|-----------------------|
| Serial Number            | 21  | 15080029   | RO     |     |       |                       |
| Hardware Version         | 22  | 1.00   | RO     |     |       |                       |
| Firmware Version         | 23  | V1.00.001.963  | RO     |     |       |                       |
| Application Specific Tag | 24  | Opto#90  | RW     |     |       |                       |
| Device Specific Tag      | 64  | Sensor#90  | RW     |     |       |                       |
| SICK-Profile Version     | 205 | 0.02   | RO     |     |       |                       |
| <b>- Parameter Menu</b>  |     |  |        |     |       |                       |
| Pin 5 Configuration      | 122 | 18   | RW     | 0   | 18    | value range:0;17;18   |
| Find Me                  | 204 | 0  | RW     | 0   | 16    | value range:0;1;16    |
| Delay Mode Q1            | 212 | 1  | RW     | 0   | 3     | value range:0;1;2;3   |
| Delay Mode Q2            | 213 | 0  | RW     | 0   | 3     | value range:0;1;2;3   |
| Delay Time Q1            | 214 | 0  | RW     | 0   | 30000 | value range:0-30000   |
| Delay Time Q2            | 215 | 0  | RW     | 0   | 30000 | value range:0-30000   |
| Quality of Run Alarm     | 226 | 0  | RW     | 0   | 100   | value range:0-100     |
| Device Access Locks      | 12  | <input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> | RW     |     |       |                       |
| Device Mode              | 65  | 0  | RW     | 0   | 129   | value range:0;128;129 |

At the bottom of the page, there is a footer with 'Welcome Admin' on the left and '© Copyright Control Corp.' on the right.

4. Optionally, click the **REFRESH** button to verify the changes have occurred.

The screenshot displays the 'IO-Link Device - Port 3' configuration page. The interface includes a navigation bar with 'HOME', 'DIAGNOSTICS', 'CONFIGURATION', and 'ADVANCED' tabs. The main content area shows a table of parameters for a SICK IO-Link device. The table is divided into two sections: '- Identification' and '- Parameter Menu'. The 'Value' column for 'Opto=90' and 'Sensor=90' is highlighted in yellow, indicating the current configuration. The 'REFRESH' and 'EDIT' buttons are visible in the top right corner of the table area.

| Parameter Name           | Index | Subindex | Value            | R/W | Unit | Min | Max   | Comments              | Group |
|--------------------------|-------|----------|------------------|-----|------|-----|-------|-----------------------|-------|
| <b>- Identification</b>  |       |          |                  |     |      |     |       |                       |       |
| Vendor Name              | 16    |          | SICK AG          | RO  |      |     |       |                       |       |
| Product Name             | 18    |          | OPR20G-RB317537  | RO  |      |     |       |                       |       |
| Serial Number            | 21    |          | 15080029         | RO  |      |     |       |                       |       |
| Hardware Version         | 22    |          | 1.00             | RO  |      |     |       |                       |       |
| Firmware Version         | 23    |          | V1.00.001.963    | RO  |      |     |       |                       |       |
| Application Specific Tag | 24    |          | Opto=90          | RW  |      |     |       |                       |       |
| Device Specific Tag      | 64    |          | Sensor=90        | RW  |      |     |       |                       |       |
| SICK-Profile Version     | 205   |          | 0.02             | RO  |      |     |       |                       |       |
| <b>- Parameter Menu</b>  |       |          |                  |     |      |     |       |                       |       |
| Pin 5 Configuration      | 122   |          | 18               | RW  |      | 0   | 18    | value range:0;17;18   |       |
| Find Me                  | 204   |          | 0                | RW  |      | 0   | 16    | value range:0;1;16    |       |
| Delay Mode Q1            | 212   |          | 1                | RW  |      | 0   | 3     | value range:0;1;2;3   |       |
| Delay Mode Q2            | 213   |          | 0                | RW  |      | 0   | 3     | value range:0;1;2;3   |       |
| Delay Time Q1            | 214   |          | 0                | RW  |      | 0   | 30000 | value range:0-30000   |       |
| Delay Time Q2            | 215   |          | 0                | RW  |      | 0   | 30000 | value range:0-30000   |       |
| Quality of Run Alarm     | 226   |          | 0                | RW  |      | 0   | 100   | value range:0-100     |       |
| Device Access Locks      | 12    |          | 0<br>0<br>0<br>0 | RW  |      |     |       |                       |       |
| Device Mode              | 65    |          | 0                | RW  |      | 0   | 129   | value range:0;128;129 |       |

IO-Link Device ISDU Interface - Port 3

Welcome Admin © Copyright Control Corp.

## Resetting an IO-Link Device to Factory Defaults

Most IO-Link device manufacturers support a **Reset to Factory** or **Reset Settings** feature that is available through the **IO-Link Device – Port** table.

You can quickly reset the sensor to factory defaults.

1. Access the corresponding **IO-Link Device – Port** page.
2. Click the **EDIT** button.
3. Click the **Reset Factory Settings** button.
4. Click **Ok** to the *Command Executed* message.
5. Click **CANCEL**.

The screenshot shows the 'IO-Link Device - Port 3' interface. At the top, there is a navigation bar with 'CONTROL' and 'Home', 'Diagnostics', 'Configuration', 'Advanced', 'Attached Devices', and 'Help'. The user is logged in as 'IO-Link Master DR-8-EIP'. Below the navigation bar, there are tabs for 'IODD FILES', 'SUMMARY', and 'PORT 1' through 'PORT 8'. The main content area displays a table of IO-Link commands for Port 3. The table has columns for 'Standard Command', 'Port', 'Command', 'IO-Link', 'Address', 'Value', and 'Value Range'. The 'Restore Factory...' button is highlighted with a red box and a '1.' label. The 'CANCEL' button in the top right corner is also highlighted with a red box and a '2.' label.

| Standard Command | Port | Command            | IO-Link | Address | Value | Value Range     |
|------------------|------|--------------------|---------|---------|-------|-----------------|
| Standard Command | 2    | 2-Point Teach...   | WO      | 67      | 67    | value range:67  |
| Standard Command | 2    | 2-Point Teach...   | WO      | 68      | 68    | value range:68  |
| Standard Command | 2    | Dynamic Teach...   | WO      | 71      | 71    | value range:71  |
| Standard Command | 2    | Dynamic Teach...   | WO      | 72      | 72    | value range:72  |
| Standard Command | 2    | 3-Point Teach...   | WO      | 75      | 75    | value range:75  |
| Standard Command | 2    | 3-Point Teach...   | WO      | 76      | 76    | value range:76  |
| Standard Command | 2    | 3-point Teach...   | WO      | 77      | 77    | value range:77  |
| Standard Command | 2    | Cancel Teach-i...  | WO      | 79      | 79    | value range:79  |
| Standard Command | 2    | Restore Factory... | WO      | 130     | 130   | value range:130 |

6. Optionally, click **REFRESH** to verify that the values have been reset to the factory defaults.

The screenshot shows the 'IO-Link Device - Port 3' configuration page. The interface includes a navigation bar with 'CONTROL' logo and tabs for 'Home', 'Diagnostics', 'Configuration', and 'Advanced'. The main content area is titled 'IO-Link Device - Port 3' and features the SICK logo. Below the title is a table of parameters with columns for Parameter Name, Index, Subindex, Value, R/W, Unit, Min, Max, and Comments. The table is divided into two sections: '- Identification' and '- Parameter Menu'. In the '- Identification' section, the 'Value' column for 'Application Specific Tag' and 'Device Specific Tag' is highlighted in yellow. In the '- Parameter Menu' section, the 'Value' column for 'Pin 5 Configuration', 'Find Me', 'Delay Mode Q1', 'Delay Mode Q2', 'Delay Time Q1', and 'Delay Time Q2' is highlighted in yellow. The footer of the page includes 'Welcome Admin' and '© Copyright Control Corp.'.

| Parameter Name           | Index | Subindex | Value           | R/W | Unit | Min | Max   | Comments            |  |
|--------------------------|-------|----------|-----------------|-----|------|-----|-------|---------------------|--|
| <b>- Identification</b>  |       |          |                 |     |      |     |       |                     |  |
| Vendor Name              | 16    |          | SICK AG         | RO  |      |     |       |                     |  |
| Product Name             | 18    |          | OPR20G-RB317537 | RO  |      |     |       |                     |  |
| Serial Number            | 21    |          | 15080029        | RO  |      |     |       |                     |  |
| Hardware Version         | 22    |          | 1.00            | RO  |      |     |       |                     |  |
| Firmware Version         | 23    |          | V1.00.001.963   | RO  |      |     |       |                     |  |
| Application Specific Tag | 24    |          | *****           | RW  |      |     |       |                     |  |
| Device Specific Tag      | 64    |          | *****           | RW  |      |     |       |                     |  |
| SICK-Profile Version     | 205   |          | 0.02            | RO  |      |     |       |                     |  |
| <b>- Parameter Menu</b>  |       |          |                 |     |      |     |       |                     |  |
| Pin 5 Configuration      | 122   |          | 17              | RW  |      | 0   | 18    | value range:0;17;18 |  |
| Find Me                  | 204   |          | 0               | RW  |      | 0   | 16    | value range:0;1;16  |  |
| Delay Mode Q1            | 212   |          | 0               | RW  |      | 0   | 3     | value range:0;1;2;3 |  |
| Delay Mode Q2            | 213   |          | 0               | RW  |      | 0   | 3     | value range:0;1;2;3 |  |
| Delay Time Q1            | 214   |          | 0               | RW  |      | 0   | 30000 | value range:0-30000 |  |
| Delay Time Q2            | 215   |          | 0               | RW  |      | 0   | 30000 | value range:0-30000 |  |
| Quality of Run Alarm     | 226   |          | 0               | RW  |      | 0   | 100   | value range:0-100   |  |
| Device Access Locks      | 12    |          | 0               | RW  |      |     |       |                     |  |