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# R95C 8-Port Discrete Bimodal to IO-Link Hub - IO-Link Data Reference Guide

## IO-Link Data Map

This document refers to the following IODD file: Banner_Engineering-R95C-8B21-KQ-20220508-IODD1.1.xml. The IODD file and support files can be found on www.bannerengineering.com under the download section of the product family page.

## Communication Parameters

The following communication parameters are used.

| Parameter | Value |
|---|---|
| IO-Link revision | V1.1 |
| Process Data In length | 144-bits |
| Process Data Out length | 8-bits |
| Bit Rate | 38400 bps |
| Minimum cycle time | 8.8 ms |
| Device ID | 659469 |

| Parameter | Value |
|---|---|
| Port class | A |
| SIO mode | Yes |
| Smart Sensor Profile | No |
| Block parameterization | Yes |
| Data Storage | Yes |

## IO-Link Process Data In (Device to Master)

### Process Data Input

| Subindex | Name | Number of Bits | Data Values |
|---|---|---|---|
| 1 | Port 1 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 2 | Port 1 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 3 | Port 2 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 4 | Port 2 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 5 | Port 3 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 6 | Port 3 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 7 | Port 4 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 8 | Port 4 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 9 | Port 5 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 10 | Port 5 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 11 | Port 6 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 12 | Port 6 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 13 | Port 7 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 14 | Port 7 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 15 | Port 8 Discrete1 Input State | 1 | False = Inactive, True = Active |
| 16 | Port 8 Discrete2 Input State | 1 | False = Inactive, True = Active [1] |
| 17 | Measurement 1 | 32 | 0..4294967295 |
| 18 | Measurement 2 | 32 | 0..4294967295 |
| 19 | Measurement 3 | 32 | 0..4294967295 |
| 20 | Measurement 4 | 32 | 0..4294967295 |

| Octet 0 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Subindex | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Bit offset | 143 | 142 | 141 | 140 | 139 | 138 | 137 | 136 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[1] Even if Discrete2 is configured as an output, the active state is still reflected at the input.

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| **Octet 1** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Subindex | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Bit offset | 135 | 134 | 133 | 132 | 131 | 130 | 129 | 128 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 2** | | | | | | | | |
| Subindex | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Bit offset | 127 | 126 | 125 | 124 | 123 | 122 | 121 | 120 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 3** | | | | | | | | |
| Subindex | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Bit offset | 119 | 118 | 117 | 116 | 115 | 114 | 113 | 112 |
| Value | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| **Octet 4** | | | | | | | | |
| Subindex | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Bit offset | 111 | 110 | 109 | 108 | 107 | 106 | 105 | 104 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 5** | | | | | | | | |
| Subindex | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Bit offset | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 |
| Value | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| **Octet 6** | | | | | | | | |
| Subindex | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Bit offset | 95 | 94 | 93 | 92 | 91 | 90 | 89 | 88 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 7** | | | | | | | | |
| Subindex | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Bit offset | 87 | 86 | 85 | 84 | 83 | 82 | 81 | 80 |
| Value | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| **Octet 8** | | | | | | | | |
| Subindex | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Bit offset | 79 | 78 | 77 | 76 | 75 | 74 | 73 | 72 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 9** | | | | | | | | |
| Subindex | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Bit offset | 71 | 70 | 69 | 68 | 67 | 66 | 65 | 64 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 10** | | | | | | | | |
| Subindex | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Bit offset | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 |
| Value | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| **Octet 11** | | | | | | | | |
| Subindex | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Bit offset | 55 | 54 | 53 | 52 | 51 | 50 | 49 | 48 |
| Value | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| **Octet 12** | | | | | | | | |
| Subindex | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |

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| **Octet 12** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bit offset | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40 |
| Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Octet 13** | | | | | | | | |
| Subindex | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| Bit offset | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 |
| Value | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| **Octet 14** | | | | | | | | |
| Subindex | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| Bit offset | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 |
| Value | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| **Octet 15** | | | | | | | | |
| Subindex | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| Bit offset | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 |
| Value | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| **Octet 16** | | | | | | | | |
| Subindex | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 |
| Bit offset | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 |
| Value | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| **Octet 17** | | | | | | | | |
| Subindex | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Bit offset | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Value | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |

## Example Based Upon the Value Above

| Subindex | Name | Data Value |
|---|---|---|
| 1 | Port 1 Discrete1 Input State | Inactive |
| 2 | Port 1 Discrete2 Input State | Active |
| 3 | Port 2 Discrete1 Input State | Active |
| 4 | Port 2 Discrete2 Input State | Active |
| 5 | Port 3 Discrete1 Input State | Inactive |
| 6 | Port 3 Discrete2 Input State | Active |
| 7 | Port 4 Discrete1 Input State | Active |
| 8 | Port 4 Discrete2 Input State | Active |
| 9 | Port 5 Discrete1 Input State | Active |
| 10 | Port 5 Discrete2 Input State | Inactive |
| 11 | Port 6 Discrete1 Input State | Active |
| 12 | Port 6 Discrete2 Input State | Active |
| 13 | Port 7 Discrete1 Input State | Active |
| 14 | Port 7 Discrete2 Input State | Active |
| 15 | Port 8 Discrete1 Input State | Active |
| 16 | Port 8 Discrete2 Input State | Active |
| 17 | Measurement 1 | 700000 |
| 18 | Measurement 2 | 33333 |
| 19 | Measurement 3 | 8585221 |
| 20 | Measurement 4 | 32 |

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# IO-Link Process Data Out (Master to Device)

## Process Data Output

| Subindex | Name | Number of Bits | Data Values |
|---|---|---|---|
| 1 | Port 1 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 2 | Port 2 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 3 | Port 3 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 4 | Port 4 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 5 | Port 5 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 6 | Port 6 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 7 | Port 7 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |
| 8 | Port 8 Discrete2 Output State | 1 | False = Off/Inactive, True = On/Active |

| **Octet 0** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Subindex | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Bit offset | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Value | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |

## Example Based Upon the Value Above

| Subindex | Name | Data Values |
|---|---|---|
| 1 | Port 1 Discrete2 Output State | Inactive |
| 2 | Port 2 Discrete2 Output State | Inactive |
| 3 | Port 3 Discrete2 Output State | Inactive |
| 4 | Port 4 Discrete2 Output State | Active |
| 5 | Port 5 Discrete2 Output State | Inactive |
| 6 | Port 6 Discrete2 Output State | Inactive |
| 7 | Port 7 Discrete2 Output State | Active |
| 8 | Port 8 Discrete2 Output State | Active |

# Parameters Set Using IO-Link

These parameters can be read from and/or written to an R95C-8B21-KQ hub. Also included is information about whether the variable in question is saved during Data Storage and whether the variable came from the IO-Link Smart Sensor Profile.

Unlike Process Data In, which is transmitted from the IO-Link device to the IO-Link master cyclically, these parameters are read or written acyclically as needed.

| Index | Sub-index | Name | Length | Value Range | Default | Access Rights | Data Storage? |
|---|---|---|---|---|---|---|---|
| 0 | 1-16 | Direct Parameter Page 1 (incl. Vendor ID & Device ID) | | | | ro | |
| 1 | 1-16 | Direct Parameters Page 2 | | | | rw | |
| 2 | | Standard Command | | 130 = Restore Factory Settings<br>162 = Start discovery<br>163 = Stop discovery | | wo | |
| 3 | | Data Storage Index (device-specific list of parameters to be stored) | | | | rw | |
| 4-11 | | *reserved by IO-Link Specification* | | | | | |
| **12** | | **Device Access Locks** | | | | | |
| 12 | 1 | Parameter Write Access Lock | | 0 = off, 1 = on | 0 | rw | y |
| 12 | 2 | Data Storage Lock | | 0 = off, 1 = on | 0 | rw | y |
| 12 | 3 | Local Parameterization Lock | | 0 = off, 1 = on | 0 | rw | y |
| 12 | 4 | Local User Interface Lock | | 0 = off, 1 = on | 0 | rw | y |

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| Index | Sub-index | Name | Length | Value Range | Default | Access Rights | Data Storage? |
|---|---|---|---|---|---|---|---|
| 16 | | Vendor Name string | | Banner Engineering Corporation | | ro | |
| 17 | | Vendor Text string | | More Sensors. More Solutions. | | ro | |
| 18 | | Product Name string | | R95C | | ro | |
| 19 | | Product ID string | | | | ro | |
| 20 | | Product Text string | | | | ro | |
| 21 | | Serial Number | | | | ro | |
| 23 | | Firmware Version | | | | ro | |
| 24 | | App Specific Tag (user defined) | | | | rw | y |
| 36 | | Device Status | 8-bit integer | 0 = Device is OK<br>1 = Maintenance required<br>2 = Out of specification<br>3 = Functional check<br>4 = Failure<br>5..255 Reserved | | ro | |
| 37 | | Detailed Device Status | Array[6] of 3-octet | | | ro | |
| 38-39 | | *reserved* | | | | | |
| 40 | | Process Data Input | | *see Process Data In* | | ro | |
| 41 | | Process Data Output | | *see Process Data Out* | | ro | |
| 42-57 | | *unused/reserved* | | | | | |
| **69** | | **All-Time Run Time** | | | | | |
| 69 | 1 | Run counter (0.25 hr) | 32-bit Integer | 0..2147483647 | | ro | y |
| **70** | | **Resettable Run Time** | | | | | |
| 70 | 1 | Run counter (0.25 hr) | 32-bit Integer | 0..2147483647 | 0 | rw | |
| **76** | | **Vendor Specific Configuration** | | | | | |
| 76 | 1 | Measurement 1 Metric Selection | 8-bit Uinteger | 0 = Disabled<br>1 = Count<br>2 = Duration<br>3 = Events per minute | 1 | rw | y |
| 76 | 2 | Measurement 1 Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 76 | 3 | Measurement 1 Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 76 | 4 | Measurement 2 Metric Selection | 8-bit Uinteger | 0 = Disabled<br>1 = Count<br>2 = Duration<br>3 = Events per minute | 3 | rw | y |
| 76 | 5 | Measurement 2 Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 76 | 6 | Measurement 2 Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 76 | 7 | Measurement 3 Metric Selection | 8-bit Uinteger | 0 = Disabled<br>1 = Count<br>2 = Duration<br>3 = Events per minute | 1 | rw | y |

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| Index | Sub-index | Name | Length | Value Range | Default | Access Rights | Data Storage? |
|---|---|---|---|---|---|---|---|
| 76 | 8 | Measurement 3 Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 76 | 9 | Measurement 3 Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 1 | rw | y |
| 76 | 10 | Measurement 4 Metric Selection | 8-bit Uinteger | 0 = Disabled<br>1 = Count<br>2 = Duration<br>3 = Events per minute | 3 | rw | y |
| 76 | 11 | Measurement 4 Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 76 | 12 | Measurement 4 Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 1 | rw | y |
| **78** | | **All-Time Run Time Event Time** | | | | | |
| 78 | 1 | Event Time (0.25 hr) | 32-bit Integer | 0..2147483647 | 0 | rw | y |
| **79** | | **Resettable Run Time Event Time** | | | | | |
| 79 | 1 | Event Time (0.25 hr) | 32-bit Integer | 0..2147483647 | 0 | rw | y |
| **80** | | **IO Metrics Port 1 to Port 4** | | | | | |
| 80 | 1 | Port 1 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 2 | Port 1 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 3 | Port 1 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 4 | Port 1 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 5 | Port 1 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 6 | Port 1 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 7 | Port 1 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 8 | Port 1 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 9 | Port 2 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 10 | Port 2 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 11 | Port 2 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 12 | Port 2 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 13 | Port 2 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 14 | Port 2 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 15 | Port 2 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 16 | Port 2 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 17 | Port 3 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 18 | Port 3 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 19 | Port 3 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 20 | Port 3 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 21 | Port 3 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 22 | Port 3 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 23 | Port 3 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 24 | Port 3 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 25 | Port 4 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 26 | Port 4 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 27 | Port 4 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |

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| Index | Sub-index | Name | Length | Value Range | Default | Access Rights | Data Storage? |
|---|---|---|---|---|---|---|---|
| 80 | 28 | Port 4 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 29 | Port 4 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 80 | 30 | Port 4 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 80 | 31 | Port 4 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 80 | 32 | Port 4 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| **81** | | **IO Metrics Port 5 to Port 8** | | | | | |
| 81 | 1 | Port 5 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 2 | Port 5 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 3 | Port 5 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 4 | Port 5 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 5 | Port 5 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 6 | Port 5 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 7 | Port 5 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 8 | Port 5 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 9 | Port 6 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 10 | Port 6 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 11 | Port 6 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 12 | Port 6 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 13 | Port 6 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 14 | Port 6 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 15 | Port 6 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 16 | Port 6 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 17 | Port 7 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 18 | Port 7 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 19 | Port 7 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 20 | Port 7 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 21 | Port 7 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 22 | Port 7 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 23 | Port 7 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 24 | Port 7 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 25 | Port 8 Discrete1 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 26 | Port 8 Discrete1 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 27 | Port 8 Discrete1 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 28 | Port 8 Discrete1 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 29 | Port 8 Discrete2 Count | 32-bit Integer | 0..2147483647 | | ro | |
| 81 | 30 | Port 8 Discrete2 Duration | 32-bit Integer | 0..2147483647, 50 µS resolution | | ro | |
| 81 | 31 | Port 8 Discrete2 Events per Minute | 32-bit Integer | 1..30000 | | ro | |
| 81 | 32 | Port 8 Discrete2 Totalizer Counter | 32-bit Integer | 0..2147483647 | | ro | |
| **82** | | **Selectable Metric Reset** | | | | | |
| 82 | 1 | Port 1 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 2 | Port 1 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 3 | Port 2 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 4 | Port 2 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 5 | Port 3 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 6 | Port 3 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 7 | Port 4 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 8 | Port 4 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 9 | Port 5 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 10 | Port 5 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 11 | Port 6 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |

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| Index | Sub-index | Name | Length | Value Range | Default | Access Rights | Data Storage? |
|---|---|---|---|---|---|---|---|
| 82 | 12 | Port 6 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 13 | Port 7 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 14 | Port 7 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 15 | Port 8 Discrete1 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 16 | Port 8 Discrete2 | Boolean | False = Do not reset, True = Reset | False | rw | |
| 82 | 17 | Port 1 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 18 | Port 1 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 19 | Port 2 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 20 | Port 2 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 21 | Port 3 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 22 | Port 3 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 23 | Port 4 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 24 | Port 4 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 25 | Port 5 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 26 | Port 5 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 27 | Port 6 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 28 | Port 6 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 29 | Port 7 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 30 | Port 7 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 31 | Port 8 Discrete1 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| 82 | 32 | Port 8 Discrete2 Reset Count | 32-bit Integer | 0..2147483647 | 0 | rw | |
| **87** | | **Port 1 Configuration** | | | | | |
| 87 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 87 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 87 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 87 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 87 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 87 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 87 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 87 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 87 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |

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| 87 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 87 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 87 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **88** | | **Port 2 Configuration** | | | | | |
| 88 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 88 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 88 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 88 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 88 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 88 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 88 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 88 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 88 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 88 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 88 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 88 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **89** | | **Port 3 Configuration** | | | | | |
| 89 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |

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| 89 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 89 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 89 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 89 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 89 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 89 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 89 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 89 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 89 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 89 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 89 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **90** | | **Port 4 Configuration** | | | | | |
| 90 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 90 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 90 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 90 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |

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| 90 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 90 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 90 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 90 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 90 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 90 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 90 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 90 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **91** | | **Port 5 Configuration** | | | | | |
| 91 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 91 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 91 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 91 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 91 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 91 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 91 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |

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| 91 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 91 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 91 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 91 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 91 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **92** | | **Port 6 Configuration** | | | | | |
| 92 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 92 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 92 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 92 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 92 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 92 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 92 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 92 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 92 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 92 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 92 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 92 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **93** | | **Port 7 Configuration** | | | | | |
| 93 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |

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|---|---|---|---|---|---|---|---|
| 93 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 93 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 93 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |
| 93 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 93 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 93 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 93 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 93 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 93 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 93 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 93 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **94** | | **Port 8 Configuration** | | | | | |
| 94 | 1 | Discrete1 IO Selection | 8-bit Uinteger | 0 = NPN input, 1 = PNP Input | 1 | rw | y |
| 94 | 2 | Discrete1 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 94 | 3 | Discrete1 Delay Timer 1 | 32-bit Integer | 0..2147483647 [Discrete1 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count] | 0 | rw | y |
| 94 | 4 | Discrete1 Delay Timer 2 | 32-bit Integer | 0..2147483647 (Discrete1 Off Delay or Totalizer time) ms | 0 | rw | y |

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| 94 | 5 | Discrete2 IO Selection | 8-bit Uinteger | 0 = NPN Input<br>1 = PNP Input<br>2 = NPN Output<br>3 = PNP Output<br>4 = NPN Output with Push Pull<br>5 = PNP Output with Push Pull | 1 | rw | y |
| 94 | 6 | Discrete2 Delay Mode | 8-bit Uinteger | 0 = Disabled<br>1 = On Off Delay<br>2 = On One-shot<br>3 = Off One-shot<br>4 = On Pulse-stretcher<br>5 = Off Pulse-stretcher<br>6 = Totalizer | 0 | rw | y |
| 94 | 7 | Discrete2 Delay Timer 1 | 32-bit Integer | 0..2147483647<br>[Discrete2 On Delay, One-shot, Pulse-stretcher time (ms), or Totalizer Count) | 0 | rw | y |
| 94 | 8 | Discrete2 Delay Timer 2 | 32-bit Integer | 0..2147483647<br>(Discrete2 Off Delay or Totalizer time) ms | 0 | rw | y |
| 94 | 9 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 94 | 10 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 94 | 11 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 94 | 12 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| **95** | | **Discrete Host Out Mirroring Configuration** | | | | | |
| 95 | 1 | Mirroring Enable | 8-bit Uinteger | 0 = Disabled, 1 = Enabled | 0 | rw | y |
| 95 | 2 | Mirroring Port Selection | 8-bit Uinteger | 0 = Port 1<br>1 = Port 2<br>2 = Port 3<br>3 = Port 4<br>4 = Port 5<br>5 = Port 6<br>6 = Port 7<br>7 = Port 8 | 0 | rw | y |
| 95 | 3 | Mirroring Channel Selection | 8-bit Uinteger | 0 = Discrete1, 1 = Discrete2 | 0 | rw | y |
| 95 | 4 | Mirroring Inversion | 8-bit Uinteger | 0 = Not inverted, 1 = Inverted | 0 | rw | y |
| 95 | 5 | Mirroring Polarity | 8-bit Uinteger | 0 = NPN Output, 1 = PNP Output | 1 | rw | y |
| 95 | 6 | Mirroring Output Type | 8-bit Uinteger | 0 = Output with Internal Pull Up/Down<br>1 = Output Open Collector<br>1 = Output Push/Pull | 0 | rw | y |

## IO-Link Events

Events are acyclic transmissions from the IO-Link device to the IO-Link master. Events can be error messages and/or warning or maintenance data.

| Code | Type | Name | Description |
|---|---|---|---|
| 25376 (0x6320) | Error | Parameter error | Check data sheet and values |
| 36000 (0x8CA0) | Warning | All-time Run Time Event | Event indicating the corresponding configured running time has elapsed. |
| 36001 (0x8CA1) | Warning | Resettable Run Time Event | Event indicating the corresponding configured running time has elapsed. |

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