



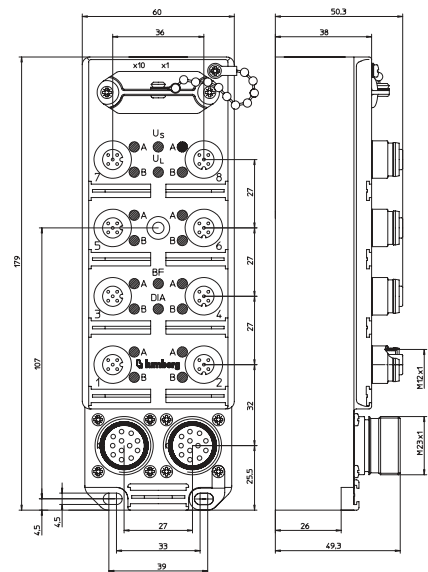
0970 PSL 209



## Profibus I/O Modules with 16-Digital Inputs

### 16 IN

Profibus-DP device with 16 digital inputs to connect standard sensors, combined M12 socket, rotary switches for addressing, M23 bus connection.



### Bit Assignment

| Bit               | 7  | 6  | 5  | 4   | 3  | 2  | 1  | 0  |
|-------------------|----|----|----|-----|----|----|----|----|
| <b>M12 Input</b>  |    |    |    |     |    |    |    |    |
| Byte 0            | 8B | 7A | 6A | 5A  | 4A | 3A | 2A | 1A |
| Byte 1            | 8B | 7B | 6B | 5B  | 4B | 3B | 2B | 1B |
| <b>Diagnostic</b> |    |    |    |     |    |    |    |    |
| DIA-Byte          | -  | -  | -  | OVL | -  | -  | -  | -  |

OVL: Overload status

### Diagnostic Indication

| LED       | Indication | Condition   |
|-----------|------------|---|
| 1...8 A/B | yellow     | channel status  |
| Us        | green      | sensor/system power supply                                  |
| UL        | green      | module electronic supply active                             |
| BF        | red        | bus error   |
| DIA       | red        | module diagnostics (sensor short-circuit / sensor overload) |

### Pin Assignment

#### Bus connection M23



- 1 = GNDI<sup>1</sup>
- 2 = Line A
- 3 = n.c.
- 4 = Line B
- 5 = n.c.
- 6 = VCCI<sup>1</sup>
- 7 = +24 V
- 8 = GND (0 V)
- 9 = Erde / earth
- 10 = n.c.
- 11 = n.c.
- 12 = RTS<sup>1</sup>
- housing = earth

#### Input M12



- 1 = +24 V
- 2 = IN B
- 3 = GND (0 V)
- 4 = IN A
- 5 = Earth

1 = internal signals



# Be Certain with Belden

## Profibus I/O Modules with 16-Digital Inputs

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### Technical Data

#### Environmental

|                             |                                |
|-----------------------------|--------------------------------|
| Degree of protection        | IP 67                          |
| Operating temperature range | -0°C (+32°F) to +60°C (+140°F) |

#### Mechanical

|                  |       |
|------------------|-------|
| Weight           | 545 g |
| Housing material | PUR   |

#### Bus system

|                         |               |
|-------------------------|---------------|
| ID number               | 044E hex      |
| GSD file                | Lum_044E.gsd  |
| Transmission rate       | max. 12 MBaud |
| Address range           | 1–126 dec     |
| Rotary address switches | 1–99 dec      |
| Default address         | 99 dec        |

#### Electronics power supply

|                             |            |
|-----------------------------|------------|
| Rated voltage               | 24 V DC    |
| Voltage range               | 19–30 V DC |
| Power consumption           | typ. 60 mA |
| Reverse polarity protection | yes        |
| Indication                  | LED green  |

#### Input power supply

|                              |                   |
|------------------------------|-------------------|
| Voltage range                | min. (UL - 1.5 V) |
| Total current of all sensors | max. 800 mA       |
| Short circuit-proof          | yes               |
| Indication                   | LED green         |

#### Inputs

|                            |                        |
|----------------------------|------------------------|
| Rated input voltage        | 24 V DC                |
| Signal state "1"           | 11–30 V                |
| Signal state "0"           | -3–5 V                 |
| Input current at 24 V      | typ. 6 mA              |
| Channel type N.O.          | p-switching            |
| Number of digital channels | 16                     |
| Channel status indicator   | LED yellow per channel |

#### Diagnostic

Module diagnostic and single channel diagnostic according to Profibus specification (please see operating instructions under [www.beldensolutions.com/downloads](http://www.beldensolutions.com/downloads))

### Included in delivery/accessories

|                   |           |
|-------------------|-----------|
| Dust covers M12   | 2 pieces  |
| Attachable labels | 10 pieces |

### Part Number

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The application of these products in harsh environments should always be checked before use.  
Specifications subject to alteration.

# Mouser Electronics

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