**Product information**

**M-FAST SFP-LH/LC**


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<th>Name</th>
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**Delivery informations**

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<tr>
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<th>available</th>
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</table>

**Product description**

**Description**

SFP Fiberoptic Fast-ETHERNET Transceiver

**Port type and quantity**

1 x 100 BASE-FX with LC connector

**Type**

M-FAST SFP-LH/LC

**Order No.**

943 868-001

**Network size - length of cable**

Multimode fiber (MM) 50/125 µm -

Multimode fiber (MM) 62.5/125 µm -

Single mode fiber (LH) 9/125 µm (long haul transceiver)

47 - 104 km 10 - 29 dB link budget bei 1550 nm A = 0.25 dB/km, 2 dB Reserve, D = 19 ps/(nm x km)

**Power requirements**

**Operating voltage**

power supply via the switch

**Power consumption**

1 W

**Service**

**Diagnostics**

optical input- and output power, transceiver temperature

**Ambient conditions**

**Operating temperature**

0°C to +60°C

**Storage/transport temperature**

-40 °C to +85 °C

**Relative humidity (non-condensing)**

10% to 95%

**MTBF**

367 years, Telcordia SR-332

**Mechanical construction**

**Dimensions (W x H x D)**

20 mm x 18 mm x 50 mm

**Mounting**

SFP slot

**Weight**

40 g

**Protection class**

IP 20

**Mechanical stability**

IEC 60068-2-27 shock

15 g, 11 ms duration, 18 shocks

IEC 60068-2-6 vibration

1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

**EMC interference immunity**

**EN 61000-4-2 electrostatic discharge (ESD)**

6 kV contact discharge, 8 kV air discharge

**EN 61000-4-3 electromagnetic field**

10 V/m (80 - 1000 MHz)

**EN 61000-4-4 fast transients (burst)**

2 kV power line, 1 kV data line

**EN 61000-4-5 surge voltage**

power line: 2 kV (line/earth), 1 kV (line/line), 1kV data line

**EN 61000-4-6 conducted immunity**

3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

**EMC emitted immunity**

FCC CFR47 Part 15

FCC CFR47 Part 15 Class A

EN 55022

EN 55022 Class A

**Approvals**

Safety of information technology equipment

n/a

Shipbuilding

Germanischer Lloyd

**Scope of delivery and accessories**

-
**Industrial Ethernet:** System Accessories: Fiberoptic Transceiver: SFP Fast-Ethernet Transceiver for media module: M-FAST SFP-LH/LC


**Accessories to order separately:** SFP module

---

For more information please contact:

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# Product information

## M-FAST SFP-LH/LC EEC

**Industrial Ethernet:** System Accessories: Fiberoptic Transceiver

**SFP Fast-Ethernet Transceiver for media module:** M-FAST SFP-LH/LC EEC


### Name

**M-FAST SFP-LH/LC EEC**

---

### Delivery information

**Availability:**

available

### Product description

**Description:** SFP Fiberoptic Fast-Ethernet Transceiver

**Port type and quantity:** 1 x 100 BASE-FX with LC connector

**Type:** M-FAST SFP-LH/LC EEC

**Order No.:** 943 948-001

**Network size - length of cable:**

- Multimode fiber (MM) 50/125 µm
- Multimode fiber (MM) 62.5/125 µm
- Single mode fiber (SM) 9/125 µm
- Single mode fiber (LH) 9/125 µm (long haul transceiver) 47 - 104 km 10 - 29 dB link budget at 1550 nm A = 0.25 dB/km, 2 dB Reserve, D = 19 ps/(nm x km)

### Power requirements

**Operating voltage:**

power supply via the switch

**Power consumption:**

1 W

### Service

**Diagnostics:**

optical input- and output power, transceiver temperature

**Ambient conditions:**

- Operating temperature: -40 °C to +85 °C
- Storage/transport temperature: -40°C to +85°C
- Relative humidity (non-condensing): 10% to 95%

**MTBF:** 367 years; Telcordia SR-332

**Mechanical construction**

- Dimensions (W x H x D): 20 mm x 18 mm x 50 mm
- Mounting: SFP slot
- Weight: 40 g
- Protection class: IP 20

**Mechanical stability**

- IEC 60068-2-27 shock: 15 g, 11 ms duration, 18 shocks
- IEC 60068-2-6 vibration: 1 mm, 2 Hz - 13.2 Hz, 90 mm; 0.7g, 13.2 Hz - 100 Hz, 90 mm; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 G/s/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

**EMC interference immunity**

- EN 61000-4-2 electrostatic discharge (ESD): 6 kV contact discharge, 8 kV air discharge
- EN 61000-4-3 electromagnetic field: 10 V/m (80 - 1000 MHz)
- EN 61000-4-4 fast transients (burst): 2 kV power line, 1 kV data line
- EN 61000-4-5 surge voltage: power line: 2 kV line/earth, 1 kV line/line, 1kV data line
- EN 61000-4-6 conducted immunity: 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

**EMC emitted immunity**

- FCC CFR47 Part 15
- EN 55022

**Approvals**

- Shipbuilding: Germanischer Lloyd, ABS, BV, DNV, LR, KR, RINA

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Hirschmann Automation and Control GmbH www.beldensolutions.com

21-01-2015

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<tr>
<td>SFP module</td>
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</tbody>
</table>

For more information please contact:

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### Product information

**M-FAST SFP-MM/LC**

---

**Industrial Ethernet:**
System Accessories
Fiber optic Transceiver:
SFP Fast-Ethernet Transceiver for media module: M-FAST SFP-MM/LC


**Delivery informations**

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<th>Value</th>
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<tbody>
<tr>
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</tr>
<tr>
<td><strong>Type</strong></td>
<td>SFP Fiberoptic Fast-ETHERNET Transceiver</td>
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<tr>
<td><strong>Availability</strong></td>
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</tbody>
</table>

**Product description**

- **Port type and quantity**: 1 x 100 BASE-FX with LC connector
- **Type**: M-FAST SFP-MM/LC

**Order No.**

- 943 865-001

**Network size - length of cable**

- **Multimode fiber (MM) 50/125 µm**: 0 - 5000 m, 0 - 8 dB link budget bei 1310 nm A = 1 dB/km, 3 dB Reserve, B = 800 MHz x km
- **Multimode fiber (MM) 62.5/125 µm**: 0 - 4000 m, 0 - 11 dB link budget bei 1310 nm A = 1 dB/km, 3 dB Reserve, B = 500 MHz x km
- **Single mode fiber (SM) 6/125 µm**: -
- **Single mode fiber (LH) 6/125 µm (long haul transceiver)**: -

**Power requirements**

- **Operating voltage**: power supply via the switch
- **Power consumption**: 1 W

**Service**

- **Diagnostics**: optical input- and output power, transceiver temperature

**Ambient conditions**

- **Operating temperature**: 0 °C to +60 °C
- **Storage/transport temperature**: -40 °C to +85 °C
- **Relative humidity (non-condensing)**: 10% bis 95%

**MTBF**

- 514 years; Telcordia SR-332

**Mechanical construction**

- **Dimensions (W x H x D)**: 20 mm x 18 mm x 50 mm
- **Mounting**: SFP slot
- **Weight**: 40 g

**Protection class**

- IP 20

**Mechanical stability**

- **IEC 60068-2-27 shock**: 15 g, 11 ms duration 16 shocks
- **IEC 60068-2-6 vibration**: 1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7 g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

**EMC interference immunity**

- **EN 61000-4-2 electrostatic discharge (ESD)**: 6 kV contact discharge, 8 kV air discharge
- **EN 61000-4-3 electromagnetic field**: 10 V/m (80 - 1000 MHz)
- **EN 61000-4-4 fast transients (burst)**: 2 kV power line, 1 kV data line
- **EN 61000-4-5 surge voltage**: power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
- **EN 61000-4-6 conducted immunity**: 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

**EMC emitted immunity**

- **FCC CFR47 Part 15**: FCC CFR47 Part 15 Class A
- **EN 55022**: EN 55022 Class A

**Approvals**

- Shipbuilding: Germanischer Lloyd

**Scope of delivery and accessories**

- -


Accessories to order separately: SFP modules

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## Product information
### M-FAST SFP-MM/LC EEC

**Industrial Ethernet**: System Accessories; Fiberoptic Transceiver

**SFP Fast-Ethernet Transceiver for media module**: M-FAST SFP-MM/LC EEC


### Name

<table>
<thead>
<tr>
<th>Name</th>
<th>M-FAST SFP-MM/LC EEC</th>
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</table>

### Delivery informations

<table>
<thead>
<tr>
<th>Description</th>
<th>SFP Fiberoptic Fast-ETHERNET Transceiver</th>
</tr>
</thead>
</table>

**Availability**: available

**Type**: M-FAST SFP-MM/LC EEC

**Order No.**: 943 945-001

### Product description

**Port type and quantity**: 1 x 100 BASE-FX with LC connector

**Network size - length of cable**

| Multimode fiber (MM) 50/125 µm | 0 - 5000 m 0 - 8 dB link budget at 1310 nm A = 1 dB/km, 3 dB Reserve, B = 800 MHz x km |
| Multimode fiber (MM) 62.5/125 µm | 0 - 4000 m 0 - 11 dB link budget at 1310 nm A = 1 dB/km, 3 dB Reserve, B = 500 MHz x km |
| Single mode fiber (SM) 6/125 µm | - |
| Single mode fiber (LM) 6/125 µm (long haul transceiver) | - |

### Power requirements

<table>
<thead>
<tr>
<th>Operating voltage</th>
<th>power supply via the switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power consumption</td>
<td>1 W</td>
</tr>
</tbody>
</table>

### Service

**Diagnostics**: optical input- and output power, transceiver temperature

**Ambient conditions**

| Operating temperature | -40 °C to +85 °C |
| Storage/transport temperature | -40°C to +85°C |
| Relative humidity (non-condensing) | 10% to 95% |

**MTBF**: 514 years; Telcordia SR-332

### Mechanical construction

<table>
<thead>
<tr>
<th>Dimensions (W x H x D)</th>
<th>20 mm x 18 mm x 50 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>SFP slot</td>
</tr>
<tr>
<td>Weight</td>
<td>40 g</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 20</td>
</tr>
</tbody>
</table>

### Mechanical stability

| IEC 60068-2-27 shock   | 15 g, 11 ms duration, 18 shocks |
| IEC 60068-2-6 vibration | 1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min. |

### EMC interference immunity

| EN 61000-4-2 electrostatic discharge (ESD) | 6 kV contact discharge, 8 kV air discharge |
| EN 61000-4-3 electromagnetic field | 10 V/m (80 - 1000 MHz) |
| EN 61000-4-4 fast transients (burst) | 2 kV power line, 1 kV data line |
| EN 61000-4-5 surge voltage | power line: 2 kV (line/earth), 1 kV (line/line), 1kV data line |
| EN 61000-4-6 conducted immunity | 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz) |

### EMC emitted immunity

| FCC CFR47 Part 15 | FCC CFR47 Part 15 Class A |
| EN 55022 | EN 55022 Class A |

### Approvals

- Safety of information technology equipment: cUL, 60950-1
- Shipbuilding: Germanischer Lloyd, ABS, BV, DNV, LR, KR, RINA


Scope of delivery and accessories

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<td></td>
<td>SFP module</td>
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</table>

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Product information
M-FAST SFP-SM/LC

**Industrial Ethernet:** System Accessories: Fiber optic Transceiver: SFP Fast-Ethernet Transceiver for media module: M-FAST SFP-SM/LC


**Name**
M-FAST SFP-SM/LC

**Description**
SFP Fiber optic Fast-ETHERNET Transceiver

**Port type and quantity**
1 x 100 BASE-FX with LC connector

**Type**
M-FAST SFP-SM/LC

**Order No.**
943 866-001

**Network size - length of cable**
- Multimode fiber (MM) 50/125 µm
  - Multimode fiber (MM) 62.5/125 µm
  - Single mode fiber (SM) 9/125 µm: 0 - 25 km 0 - 13 dB link budget at 1310 nm A = 0.4 dB/km, 3 dB Reserve, B = 800 MHz x km
  - Single mode fiber (LH) 9/125 µm (long haul transceiver)

**Power requirements**
- Operating voltage: power supply via the switch
- Power consumption: 1 W

**Service**
- Diagnostics: optical input- and output power, transceiver temperature

**Ambient conditions**
- Operating temperature: 0°C to +60°C
- Storage/transport temperature: -40°C to +85°C
- Relative humidity (non-condensing): 10% to 95%
- MTBF: 652 years; Telcordia SR-332

**Mechanical construction**
- Dimensions (W x H x D): 20 mm x 18 mm x 50 mm
- Mounting: SFP slot
- Weight: 40 g
- Protection class: IP 20

**Mechanical stability**
- IEC 60068-2-27 shock: 15 g, 11 ms duration, 18 shocks
- IEC 60068-2-6 vibration: 1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.
- EMC interference immunity
  - EN 61000-4-2 electrostatic discharge (ESD): 6 kV contact discharge, 8 kV air discharge
  - EN 61000-4-3 electromagnetic field: 10 V/m (80 - 1000 MHz)
  - EN 61000-4-4 fast transients (burst): 2 kV power line, 1 kV data line
  - EN 61000-4-5 surge voltage: power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
  - EN 61000-4-6 conducted immunity: 3 V (10 kHz - 150 kHz, 10 V (150 kHz - 80 MHz)
- EMC emitted immunity
  - FCC CFR47 Part 15: FCC CFR47 Part 15 Class A
  - EN 55022: EN 55022 Class A

**Approvals**
- Shipbuilding: Germanischer Lloyd

**Scope of delivery and accessories**
- Scope of delivery: -


Accessories to order separately: SFP module

For more information please contact:
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## Product information
### M-FAST SFP-SM/LC EEC

**Industrial Ethernet:** System Accessories: Fiber optic Transceiver: SFP Fast-Ethernet Transceiver for media module: M-FAST SFP-SM/LC EEC


<table>
<thead>
<tr>
<th>Name</th>
<th>M-FAST SFP-SM/LC EEC</th>
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</table>

### Delivery informations

**Availability:** available

**Product description**

- SFP Fiberoptic Fast-Ethernet Transceiver

**Port type and quantity:** 1 x 100 BASE-FX with LC connector

**Type:** M-FAST SFP-SM/LC EEC

**Order No.:** 943 946-001

**Network size - length of cable**

- Multimode fiber (MM) 50/125 µm
- Multimode fiber (MM) 62.5/125 µm
- Single mode fiber (SM) 9/125 µm (short haul transceiver)
- Single mode fiber (LH) 9/125 µm (long haul transceiver)

**Power requirements**

- Operating voltage: power supply via the switch
- Power consumption: 1 W

### Service

**Diagnistics:** optical input- and output power, transceiver temperature

**Ambient conditions**

- Operating temperature: -40 ºC to +85 ºC
- Storage/transport temperature: -40°C to +85°C
- Relative humidity (non-condensing): 10% to 95%
- **MTBF:** 652 years; Telcordia SR-332

**Mechanical construction**

- Dimensions (W x H x D): 20 mm x 18 mm x 50 mm
- Mounting: SFP slot
- Weight: 40 g
- **Protection class:** IP 20

**Mechanical stability**

- IEC 60068-2-27 shock: 15 g, 11 ms duration, 18 shocks
- IEC 60068-2-6 vibration: 1 mm, 2 Hz - 13.2 Hz, 90 mm.; 0.7g, 13.2 Hz - 100 Hz, 90 mm.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles; 1 g, 9 Hz - 150 Hz, 10 cycles; 1 octave/min.

**EMC interference immunity**

- EN 61000-4-2 electrostatic discharge (ESD): 6 kV contact discharge, 8 kV air discharge
- EN 61000-4-3 electromagnetic field: 10 V/m (80 - 1000 MHz)
- EN 61000-4-4 fast transients (burst): 2 kV power line, 1 kV data line
- EN 61000-4-5 surge voltage: power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
- EN 61000-4-6 conducted immunity: 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

**EMC emitted immunity**

- FCC CFR47 Part 15: FCC CFR47 Part 15 Class A
- EN 55022: EN 55022 Class A

**Approvals**

- Safety of information technology equipment: cUL 60950-1
- Shipbuilding: Germanischer Lloyd, ABS, BV, DMV, LR, KR, RINA


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<tr>
<td>Accessories to order separately</td>
<td>SFP module</td>
</tr>
</tbody>
</table>

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# Product information

**M-FAST SFP-SM+/LC**

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<tr>
<td>Port type and quantity</td>
<td>1 x 100 BASE-FX with LC connector</td>
</tr>
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<td><strong>Order No.</strong></td>
<td>943 867-001</td>
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<tr>
<td><strong>Network size - length of cable</strong></td>
<td></td>
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<tr>
<td>Multimode fiber (MM) 50/125 µm</td>
<td>-</td>
</tr>
<tr>
<td>Multimode fiber (MM) 62.5/125 µm</td>
<td>-</td>
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<tr>
<td>Single mode fiber (SM) 50/125 µm</td>
<td>25 - 65 km, 10 - 29 dB link budget at 1310nm A = 0.4 dB/km, 3 dB Reserve, B = 800 MHz x km</td>
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<tr>
<td>Single mode fiber (SM) 9/125 µm (long haul transceiver)</td>
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<td><strong>Power requirements</strong></td>
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<tr>
<td>Operating voltage</td>
<td>power supply via the switch</td>
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<tr>
<td>Power consumption</td>
<td>1 W</td>
</tr>
</tbody>
</table>

### Service

#### Diagnostics
- optical input- and output power, transceiver temperature

#### Ambient conditions
- **Operating temperature**: 0 °C to +60 °C
- **Storage/transport temperature**: -40 °C to +85 °C
- **Relative humidity (non-condensing)**: 10% to 95%

#### MTBF
- 639 years; Telcordia SR-332

#### Mechanical construction
- **Dimensions (W x H x D)**: 20 mm x 18 mm x 50 mm
- **Mounting**: SFP slot
- **Weight**: 40 g
- **Protection class**: IP 20
- **Mechanical stability**
  - IEC 60068-2-27 shock: 15 g, 11 ms duration, 18 shocks
  - IEC 60068-2-6 vibration: 1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7 g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

#### EMC interference immunity
- **EN 61000-4-2 electrostatic discharge (ESD)**: 6 kV contact discharge, 8 kV air discharge
- **EN 61000-4-3 electromagnetic field**: 10 V/m (80 - 1000 MHz)
- **EN 61000-4-4 fast transients (burst)**: 2 kV power line, 1 kV data line
- **EN 61000-4-5 surge voltage**: power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
- **EN 61000-4-6 conducted immunity**: 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

### EMC emitted immunity
- **FCC CFR47 Part 15**: FCC CFR47 Part 15 Class A
- **EN 55022**: EN 55022 Class A

### Approvals
- **Safety of information technology equipment**: cUL 60950-1
- **Shipbuilding**: Germanischer Lloyd, ABS, BV, DNV, LR, KR, RINA
**Industrial Ethernet:**
**System Accessories:**
**Fiber optic Transceiver:** SFP Fast-Ethernet Transceiver for media module: M-FAST-SFP-SM+/LC


**Scope of delivery and accessories**

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<tr>
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<td>SFP module</td>
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Product information
M-FAST SFP-SM+/LC EEC


Name
M-FAST SFP-SM+/LC EEC

SFP Fiberoptic Fast-ETHERNET Transceiver

Delivery informations
Availability
available

Product description
Description
SFP Fiberoptic Fast-ETHERNET Transceiver

Port type and quantity
1 x 100 BASE-FX with LC connector

Type
M-FAST SFP-SM+/LC EEC

Order No.
943 947-001

Network size - length of cable
Multimode fiber (MM) 50/125 µm
- Multimode fiber (MM) 62.5/125 µm
- Single mode fiber (SM) 9/125 µm
  25 - 65 km 10 - 29 dB link budget bei 1310nm A = 0.4 dB/km, 3 dB Reserve, B = 800 MHz x km

Single mode fiber (LH) 9/125 µm (long haul transceiver)
-

Power requirements
Operating voltage
power supply via the switch

Power consumption
1 W

Service
Diagnostics
optical input- and output power, transceiver temperature

Ambient conditions
Operating temperature
-40 °C to +85 °C

Storage/transport temperature
-40°C to +85°C

Relative humidity (non-condensing)
10% to 95%

MTBF
639 years; Telcordia SR-332

Mechanical construction
Dimensions (W x H x D)
20 mm x 18 mm x 50 mm

Mounting
SFP slot

Weight
40 g

Protection class
IP 20

Mechanical stability
IEC 60068-2-27 shock
15 g, 11 ms duration, 18 shocks

IEC 60068-2-6 vibration
1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

EMI interference immunity
EN 61000-4-2 electrostatic discharge (ESD)
6 kV contact discharge, 8 kV air discharge

EN 61000-4-3 electromagnetic field
10 V/m (80 - 1000 MHz)

EN 61000-4-4 fast transients (burst)
2 kV power line, 1 kV data line

EN 61000-4-5 surge voltage
power line: 2 kV line/earth, 1 kV line/line, 1 kV data line

EN 61000-4-6 conducted immunity
3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

EMC emitted immunity
FCC CFR47 Part 15
FCC CFR47 Part 15 Class A
EN 55022
EN 55022 Class A

Approvals
Shipbuilding
Germanischer Lloyd

Scope of delivery and accessories
Scope of delivery
-


Accessories to order separately: SFP module

For more information please contact:
Hirschmann Automation and Control GmbH
Stuttgarter Strasse 45-51
72654 Neckartenzlingen
Germany
Phone: +49 7127/14-1809
E-Mail: inet-sales@belden.com

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# Product information

## M-FAST SFP-TX/RJ45 - M-FAST SFP-TX/RJ45

**Industrial Ethernet:** System Accessories: Fiberoptic Transceiver: SFP Fast-Ethernet Transceiver for media module: M-FAST SFP-TX/RJ45


<table>
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<tr>
<th>Name</th>
<th>M-FAST SFP-TX/RJ45</th>
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**Description**

SFP TX Fast Ethernet Transceiver for Switch RSP only port 1/2 and PRP (Parallel Redundancy Protocol), 100 Mbit/s full duplex auto neg. fixed, cable crossing not supported

**Port type and quantity**

1 x 100BASE-T with RJ45-socket

**Type**

M-FAST SFP-TX/RJ45

**Order No.**

942 098-001

**Replaced by**

M-FAST SFP-TX/RJ45 EEC

**Network size - length of cable**

Twisted pair (TP)

0 m ... 100 m

**Power requirements**

Power supply via the switch

Power consumption

1 W

**Ambient conditions**

Operating temperature

0 ºC ... +60 ºC

Storage/transport temperature

-40°C ... +85°C

Relative humidity (non-condensing)

10% ... 95%

MTBF

67 years (Telcordia GR-468-CORE)

**Mechanical construction**

Dimensions (W x H x D)

14 mm x 14 mm x 70 mm

Mounting

SFP slot

Weight

40 g

Protection class

IP 20

**Mechanical stability**

IEC 60068-2-27 shock

15 g, 11 ms duration, 18 shocks

IEC 60068-2-6 vibration

1 mm, 2 Hz - 13.2 Hz, 90 min. 0.7g, 13.2 Hz - 100 Hz, 90 min. 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min. 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

**EMC interference immunity**

EN 61000-4-2 electrostatic discharge (ESD)

6 kV contact discharge, 8 kV air discharge

EN 61000-4-3 electromagnetic field

10 V/m (80 - 1000 MHz)

EN 61000-4-4 fast transients (burst)

2 kV power line, 1 kV data line

EN 61000-4-5 surge voltage

power line: 2 kV line/earth, 1 kV line/line, 1kV data line

EN 61000-4-6 conducted immunity

3 V (10 kHz - 150 kHz), 10 V (150 kHz - 20 MHz)

**EMC emitted immunity**

FCC CFR47 Part 15

FCC CFR47 Part 15 Class A

EN 55022

EN 55022 Class A

**Approvals**

Safety of information technology equipment

cUL 60950-1

**Scope of delivery and accessories**

SFP module
For more information please contact:
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