

OBU-102 Series

2-channel optical fiber bypass units



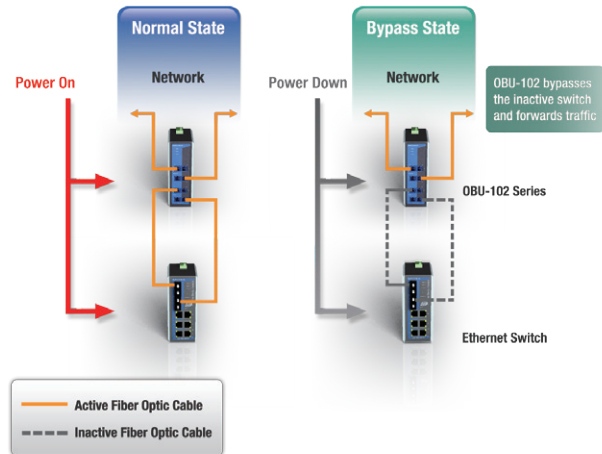
- > Supports Fast, Gigabit and 10 Gigabit Ethernet fiber connections in SC/ST/LC connectors
- > Redundant dual 12/24/48 VDC power inputs
- > IP30 metal housing
- > -20 to 70°C operating temperature range
- > DIN-Rail mounting ability
- > Ultra low power consumption 0.72 W



Introduction

Moxa's OBU-102 fiber optical bypass units add bypass relay functionality to any network node. In linear topologies, a single power outage or node failure can take out an entire chunk of the network, because communications to all the network nodes further down the line are also cut. With relay bypass, that node is instead simply bypassed in the event of a failure, and the rest of the network is unaffected.

The OBU-102 sits between a node and the network to add bypass relay functionality to any network switches that do not already support this important function. In normal operations, the OBU-102 simply acts as a gateway that forwards network traffic to and from the network switch. However, if power is lost, the OBU-102 will bypass the unpowered switch and simply pass network traffic to the next switch in the relay.



Specifications

Bypass Properties

Optical Switching Time: Max. 10 ms
Insertion Loss: Max. 1.6 dB

Interface

Fiber Ports: 100M/1G/10G fiber in SC/ST/LC connector, single mode
Rotary Switch: configure boot delay interval
LED Indicators: PWR1, PWR2, STATE

Power Requirements

Input Voltage: 12/24/48 VDC redundant dual inputs
Overload Current Protection: 1100 mA @ 48 VDC
Connection: 2 removable 2-contact terminal block
Reverse Polarity Protection: Present

Physical Characteristics

Housing: Metal, IP30 protection
Dimensions:
 53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in)
Weight: 700 g
Installation: DIN-Rail mounting, wall mounting (with optional kit)

Environmental Limits

Operating Temperature: -20 to 70°C (-4 to 158°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 508
EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A
EMS:
 EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3,
 EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3,
 EN 61000-4-6 (CS) Level 3, EN 61000-4-8, EN 61000-4-11
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
Note: Please check Moxa's website for the most up-to-date certification status.

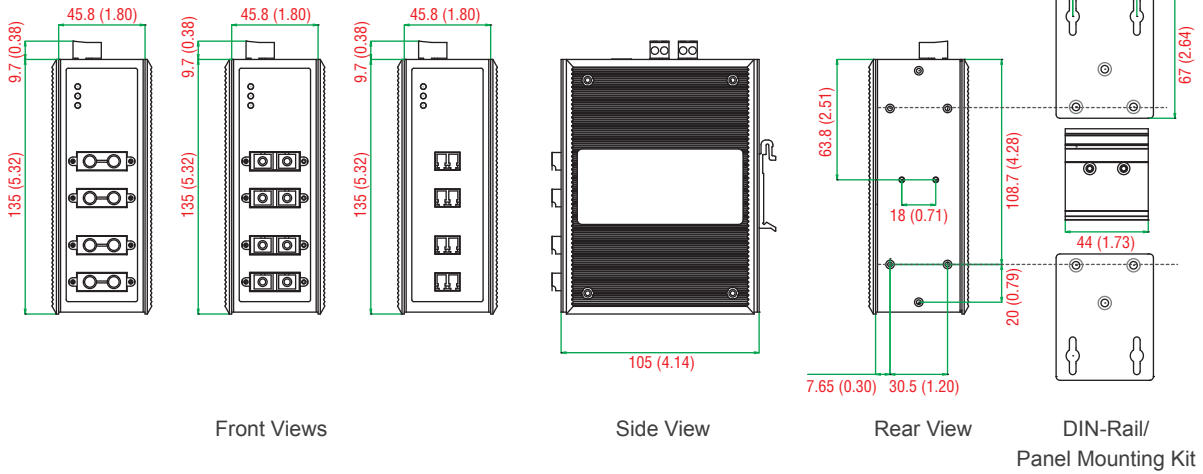
Warranty

Warranty Period: 2 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

OBU-102-SS-ST OBU-102-SS-SC OBU-102-SS-LC



Ordering Information

| Available Models (-20 to 75°C) | Port Interface | | |
|-----------------------------------|------------------------------|------------------------------|------------------------------|
| | Single-mode, SC Connector | Single-mode, ST Connector | Single-mode, LC Connector |
| OBU-102-SS-SC | 4 | – | – |
| OBU-102-SS-ST | – | 4 | – |
| OBU-102-SS-LC | – | – | 4 |

Optional Accessories (can be purchased separately)

DR-4524/75-24/120-24: 45/75/120 W DIN-Rail 24 VDC power supplies

MDR-40-24/60-24: 40/60 W DIN-Rail 24 VDC power supplies, -20 to 70°C operating temperature

WK-30: Wall mounting kit

WK-46: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit

Package Checklist

- OBU-102 unit
- Hardware installation guide (printed)
- Warranty card