

# Optolinx FCU-100

10/100BaseTX to 100BaseFX Media Converter

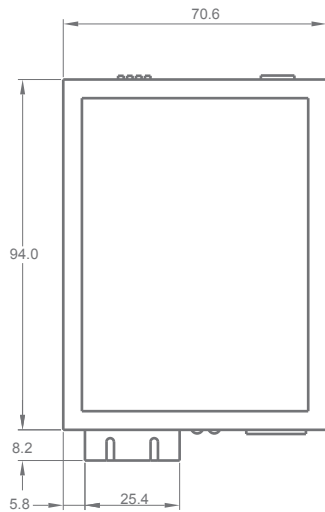


## Features

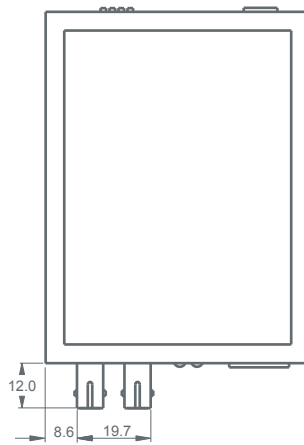
- ▶ Complies with IEEE 802.3 100BaseT & 802.3u 100BaseTX/FX Standards
- ▶ Store-and-Forward Switching Mechanism
- ▶ Auto-Crossover for MDI/MDIX in TP Port
- ▶ 10/100Mbps Auto Negotiation
- ▶ Supports Link-Fault-Pass-Through
- ▶ LED: Power, FDX, TP 100, TP Link/Act, Fiber 100, Fiber Link/Act
- ▶ Supports 1K MAC Address
- ▶ Supports 48K Byte Packet Buffer
- ▶ Configuration DIP Switch Supports Auto, Speed, Duplex, Auto MDI/MDIX, & Link-Fault-Pass-Through
- ▶ 5-Year Warranty



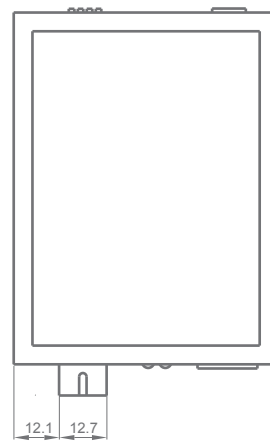
## ▶ Specifications



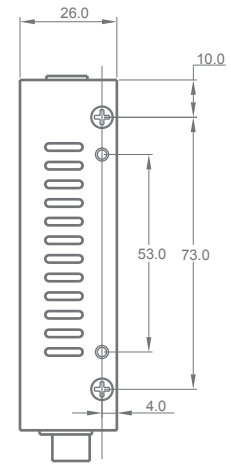
Top View (SC)



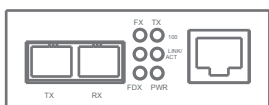
Top View (ST)



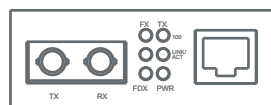
Top View (WDM)



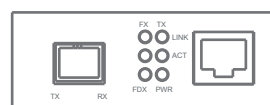
Side View



Panel View (SC)



Panel View (ST)



Panel View (WDM)



Rear View

## ► Specifications

### Standard

IEEE 802.3 100BaseT  
IEEE 802.3u 100BaseTX & 100BaseFX

### Interface

10/100BaseT: 1 x RJ45 Port  
100BaseFX: 1 x SC Port

### Connector Type

FCU-100SC/SC-Sx/WA/WB-Sx: SC Connector  
FCU-100ST: ST Connector

### Wavelength

FCU-100SC/ST/SC-Sx: 1310nm  
FCU-100WA-Sx: TX-1310nm; RX-1550nm  
FCU-100WB-Sx: TX-1550nm; RX-1310nm

### Typical Distance

FCU-100SC/ST: 2 Km  
FCU-100SC-S3: 30 Km  
FCU-100SC-S5: 50 Km  
FCU-100SC-S8: 80 Km  
FCU-100WA/WB-S2: 20 Km  
FCU-100WA/WB-S8: 80 Km

### Minimum TX Power

FCU-100SC/ST: -19.0 dBm  
FCU-100SC-Sx: -15.0 ~ 0 dBm  
FCU-100WA/WB-S2: -14.0 dBm  
FCU-100WA/WB-S8: -2.0/-3.0 dBm

### Maximum TX Power

FCU-100SC/ST: -14.0 dBm  
FCU-100SC-Sx: -8.0 ~ 5.0 dBm  
FCU-100WA/WB-S2: -8.0 dBm  
FCU-100WA/WB-S8: 3.0 dBm

### Sensitivity

FCU-100SC/ST: -30.0 dBm  
FCU-100SC-Sx: -36.0 ~ -34.0 dBm  
FCU-100WA/WB-S2: -33.0 dBm  
FCU-100WA/WB-S8: -35.0 dBm

### Link Budget

FCU-100SC/ST: 11.0 dB  
FCU-100SC-Sx: 19.0 ~ 36.0 dB  
FCU-100WA/WB-S2: 19.0 dB  
FCU-100WA/WB-S8: 33.0/32.0 dB

### Switching Method

Store and Forward

### Data Transfer Rate

200 Mbps - Full Duplex

### MAC Table

1K

### Memory Buffer

48K

### Forward/Filter Rate

Filtering Rate (Ethernet) - 14,880 pps  
Filtering Rate (Fast Ethernet) - 148,800 pps

### LED

Power, FDX, TP100, TP Link/ACT, FX100, FX Link/ACT

### Power

External Power Supply: DC 5V, 1.6A

### Power Consumption

5 Watts

### Operation Temperature

0° C to 50° C (32° F to 122° F)

### Storage Temperature

-20° C to 60° C (-4° F to 140° F)

### Operation Humidity

5% to 90% (Non-condensing)

### Mechanical

Casing: IP30 Metal Case  
Dimension (W x H x D): 71 x 94 x 26 mm (2.80 x 3.70 x 1.02 inches)  
Weight: 0.6 Kg (1.3 lbs)  
Installation: DIN-Rail/Wall Mountable

### Emission/Safety

FCC Class A, CE

### Warranty

5-Year Warranty

## ► Ordering Information

FCU-100SC	10/100TX - 100FX Media Converter, Standalone Module, Multi-Mode, SC, 2Km
FCU-100ST	10/100TX - 100FX Media Converter, Standalone Module, Multi-Mode, ST, 2Km
FCU-100SC-S3	10/100TX - 100FX Media Converter, Standalone Module, Single-Mode, SC, 30Km
FCU-100SC-S5	10/100TX - 100FX Media Converter, Standalone Module, Single-Mode, SC, 50Km
FCU-100SC-S8	10/100TX - 100FX Media Converter, Standalone Module, Single-Mode, SC, 80Km
FCU-100WA-S2	10/100TX - 100FX Single-Strand Fiber (WDM), Standalone Module, Single-Mode, SC, 20Km, TX-1310nm; RX-1550nm
FCU-100WB-S2	10/100TX - 100FX Single-Strand Fiber (WDM), Standalone Module, Single-Mode, SC, 20Km, TX-1550nm; RX-1310nm
FCU-100WA-S8	10/100TX - 100FX Single-Strand Fiber (WDM), Standalone Module, Single-Mode, SC, 80Km, TX-1310nm; RX-1550nm
FCU-100WB-S8	10/100TX - 100FX Single-Strand Fiber (WDM), Standalone Module, Single-Mode, SC, 80Km, TX-1550nm; RX-1310nm

### Optional Accessories

AD-SCM-STF-M	SC (Male) to ST (Female) Duplex Adapter (Multi-Mode)
AD-SCM-STF-S	SC (Male) to ST (Female) Duplex Adapter (Single-Mode)
FCU-BK	Mounting Brackets for FCU Modules
DIN-RAIL-KIT	DIN-Rail Mounting Kit

### Antaira Technologies

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