OCEAN MATRIX®

INSTALLATION & SPECIFICATIONS

OMX-E2F
12 Mile/20KM Singlemode 100Base-T Fast Ethernet to SC Fiber Converter

Installation

1. Devices must operate at 100Mbps and at the same duplex mode.
2. Connect Cat5 cable from network device to the RJ45 connector on the transmitter.
3. Use fiber optic cable to connect the FIBER OUT on the TX to the FIBER IN on the RX.
4. Connect Cat5 cable from the RJ45 connector on the receiver to network device.
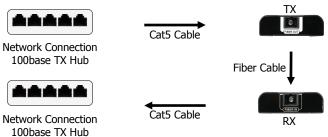5. Connect power supplies.

Transmitter & Receiver

| LED Power Indicator | Power Port | RJ45 Port | FX Fiber Signal Status | TX Network Signal Status |

END TO END CONNECTION

Network Connection 100base TX Hub — Cat5 Cable → TX

Fiber Cable ↓

Network Connection 100base TX Hub ← Cat5 Cable — RX

Transmitter — Fiber Out

Receiver — Fiber In

STANDALONE UTP TO SC FIBER

Network Connection 100base Hub — Cat5 Cable → TX — Fiber Cable → Network Connection 100base FX/TX Hub

STANDALONE SC FIBER TO UTP

Network Connection 100base FX/TX Hub — Fiber Cable → RX — Cat5 Cable → Network Connection 100base Hub

LED Indicator Status
Steady Light—signal connected
Flashing—signal transmitting

Includes—2 5VDC/1A Power Supply

Specifications	
Compliant	IEEE 802.3x, 100BASE-TX, 100Base-FX
Transmission Distance	12.43 miles/20km Singlemode, 1640 feet/500 meters Multimode
Transmission Mode	Half (one direction at a time) or Full Duplex (both directions simultaneously) Dependent on Connected Equipment
Transmission Rate	100M bps
Connectors	RJ45 Ethernet to SC Fiber
Power Supply	5VDC/1A
Power Consumption	3.5W
Dimensions (LxWxH)	2.65x2.11x0.67 in / 67.2x53.6x17mm
Weight	3.5 oz /0.1kg

Troubleshooting

LED Signal Status Indicator is not lit
- Ensure power supply is firmly connected. Only use the 5VDC power adapter included with the unit.
- Check that the cables are securely connected.
- Use only UTP cables that comply with EIA/TIA 568 specifications and fiber optic cables that comply with industry standards.

Data is not transmitting
- Check all connections.
- Ensure fiber cable distance does not exceed 12.43 miles/20km Singlemode, 1640 feet/500 meters Multimode.

SAFETY PRECAUTIONS

1. To prevent fire or shock hazard, do not expose this equipment to high humidity and/or dust. Do not use in an unprotected outdoor installation nor any area classified as overly damp or wet.

2. The temperature for installation should be kept between 32°F to 140°F (0°C to 60°C). Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.

3. Do not disassemble the unit or place it on an unstable base.

4. Do not drop the unit and avoid heavy impact.

5. This unit should not be permanently installed unless proper ventilation is provided. Any enclosure openings must not be blocked or covered as they protect the unit from overheating.

6. Before cleaning, turn off the power and unplug the unit from all connections. Use a damp cloth. Do not use liquid cleaners nor aerosol cleaners.

7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.

8. Enclosure entry is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

9. Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.

10. There are no user-serviceable parts inside the unit. If the unit requires service contact your authorized dealer, or an authorized repair service company.