



**BROADCAST FIBER OPTIC SOLUTIONS**

**USER MANUAL**  
**CAMPLEX FIBERGIG**  
**2-Channel Bidirectional GigaBit Ethernet**  
**Fiber Optic Transport**



**CMX-FG700—opticalCON Quad I/O**



**CMX-FG750—ST Fiber I/O**

# CMX-FG700/FG750

## Complex 2-Channel Bidirectional GigaBit Ethernet Fiber Optic Transport

The Complex FIBERGIG CMX-FG700 is 2 separate 1GIGe Ethernet to fiber media converters in convenient 1RU rack mount cabinets. Each channel is a Gigabit Ethernet over a singlemode fiber optic data transport system in a rack-mount enclosure with either one opticalCON quad connector (model FG700) or four ST connectors (model FG750) . The transport system is a convenient rackmount solution for transporting data and power as it meets PoE standards.

The system converts IEEE 802.3at/af copper Ethernet to long distance or remote connection points with singlemode fiber up to 12 miles. This is a perfect interface solution for Dante devices that require LAN to communicate with other devices. Designed for remote trucks, field production, and live events, saving installation time. A single IEC AC power cord powers each TX and RX unit reducing the number of cables.

### Includes

- Two 1RU cabinets; one TX and one RX unit
- Two standard 6 foot IEC type power cords
- Rack screws for installation in a standard 19" equipment rack

### Features

- Up to 30 watts of power per port via PoE standards
- Gigabit Ethernet features 1000BaseT to 1000BaseX fiber media conversion
- Ethernet spec meets DANTE requirements 802.3at/af
- Convenient single rack unit enclosure with front panel connections for each Tx and Rx unit
- Standard IEC 110/240vac 50/60Hz power inlet on back panel
- Singlemode fiber connection on either opticalCON Quad or four ST fiber connections
- Transmission range: 12 miles (20km)
- Lightweight, rugged, aluminum cabinet

# CMX-FG700/FG750

## Specifications

- GigE ethernet copper and fiber
- 802.3at/802.3af PoE standards compliance
- 1000BASE-T to 1000BASE-X
- RJ45 to fiber Ethernet converter port [2X: separate Ethernets out of the box, combinable if desired]
- Black anodized aluminum housing
- Rugged Neutrik/Senko connectors



**CMX-FG550**  
2 Ch 3G-SDI,

**CMX-FG500**  
2 Ch 3G-SDI,

**CMX-FG650**  
2 Ch 3G-SDI & GIG-E,

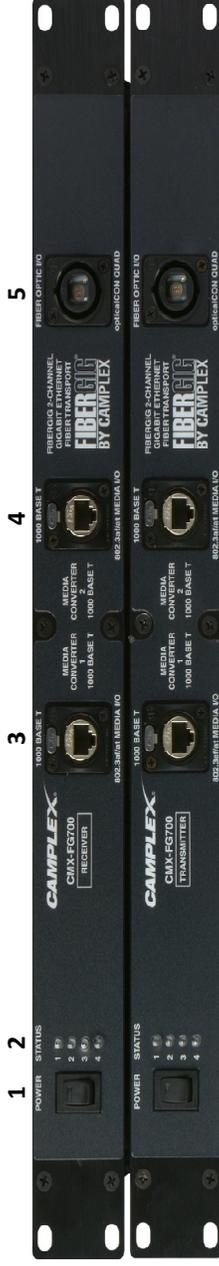
**CMX-FG600**  
2 Ch 3G-SDI & GIG-E,

**CMX-FG750**

**CMX-FG700**  
2 Ch GIG-E,

*Complex FiberGig Series*

# CMX-FG700 Features



**Transmitter**

**Receiver**

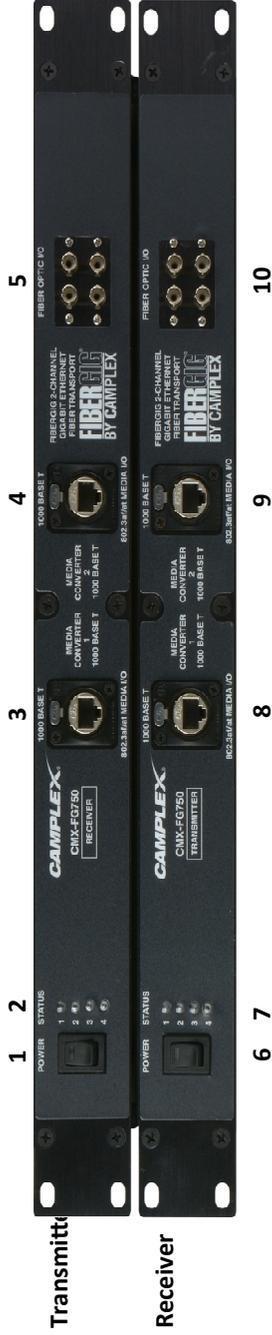
## CMX-FG700 Transmitter

- 1 Power Switch
- 2 Status LED Indicators
- 3 Converter 1 802.af/at Media I/O
- 4 Converter 2 802.af/at Media I/O
- 5 opticalCON Quad I/O

## CMX-FG700 Receiver

- 6 Power Switch
- 7 Status LED Indicators
- 8 Converter 1 802.af/at Media I/O
- 9 Converter 2 802.af/at Media I/O
- 10 opticalCON Quad I/O

# CMX-FG750 Features



## CMX-FG750 Transmitter

- 1 Power Switch
- 2 Status LED Indicators
- 3 Converter 1 802.af/at Media I/O
- 4 Converter 2 802.af/at Media I/O
- 5 Four ST I/O

## CMX-FG750 Receiver

- 6 Power Switch
- 7 Status LED Indicators
- 8 Converter 1 802.af/at Media I/O
- 9 Converter 2 802.af/at Media I/O
- 10 Four ST I/O

# CMX-FG700/FG750 Features Back Panel

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## CMX-FG700/750 Transmitter & Receiver

- 11 AC Power Input 2A/110-240VAC 50/60Hz

## CMX-FG700/750 Set Up Instructions

1. Secure the units in a safe location, where they will not be subject to impact and where there is room around the unit so nothing will interfere with the fiber optic cabling causing it to bend sharply in a tight radius in any way which can severely affect the signal transfer.
2. Carefully connect your source(s) to the transmitter input(s) and the receiver unit output(s) to your receiving device input(s) using the Cat5/5e/6 UTP RJ45 cable connectors on the transmitter and on the receiver unit.
3. CLEAN\* the fiber optical cable contacts that will be used for connecting the Tx and Rx units and attach the fiber cable to the connections and secure, as you would secure a bayonet BNC. While pressing lightly in on the connector, twist it in a clockwise direction about 1/8 to 1/4 of a turn and then release. The connector should stay inserted and have backwards spring pressure holding the bayonet in place.
4. Connect the included power supplies to the transmitter & receiver units, and plug them both into an AC power source.

\* CLEAN: All fiber optical cable contacts (the end that is inserted and makes contact to enable light wave transmission through the fiber) require cleaning each time before inserting into a device's outputs or inputs. Failure to clean the contacts can damage the unit's optics over time and also render the cable and the device nonoperational.

Use cleaning kits designed specifically for fiber optics. Other cleaners may add contaminants not seen by the naked eye which could damage cables and/or equipment.



## **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.
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 or 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.