10/100/1000TX Gigabit Ethernet Media Converter with One Duplex SC/ST Fiber Port

LC-MCGxx-XX Series

User's Manual

FCC Warning

The LC-MCGxx-XX series of media converters have been tested and found to comply within the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These standards are designed to provide reasonable protection against harmful interference when these devices are operated in a commercial environment. These devices generate, use and can radiate radio frequency energy and may cause harmful interference to radio communications unless installed in accordance with this User's Manual. Operation of these devices in a residential area is likely to cause harmful interference which will make the user responsible for the appropriate remedial action at his/her own expense.

CE Warning

These are Class A products. In a domestic environment these products may cause radio interference. The user will need to take appropriate precautions.

Notices

- This product is suitable for indoor use only
- Put the dust covers back on the fiber ports when not in use
- **WARNING**: Never look directly down into any fiber optic port as retinal damage may result

Installation (Stand Alone Use)

1. Place the Converter on a clean, flat and safe location that has easy & close access to AC power.
2. Connect a Cat5e (or better) Ethernet cable to the RJ45 port of the LC-MCGxx-XX series converter. (This port is auto-negotiating and auto-crossover)
3. Connect the other end of the Cat5e (or better) Ethernet Cable into your network device (Switch, Router, PC, etc.)
4. Remove the dust cover plugs from the duplex fiber port.
5. Identify the TX and RX legs of your duplex fiber optic cable and the match them up with the duplex fiber port. Insert the appropriate legs into the duplex fiber port.
6. Insert the other end of the fiber optic cable into your remote network device or 2nd media converter making sure to keep track of which ones are the TX & RX legs.
7. Insert the power cable plug directly into its receptacle located at the back of the LC-MCGxx-XX series converter.
8. Plug the power adapter into an available AC socket.
9. Check the LED's as the device is powered on to verify that the Power LED is lit. If not, check that the power cable is inserted correctly into the unit and securely plugged into the wall outlet.
10. Check the Network connection LED's to make sure you are connected and able to transmit data.

Installation (Use with L-com LC-MCC14AA 14 Slot Media Converter Chassis)

1. Check the orientation of the media converter, and then install the retention bracket that is included with the chassis. (For detailed installation instructions for the Chassis refer to its user's manual)
2. Slide the Converter into the specific slot in the chassis that you intend to use making sure to seat the unit properly onto the Power connection at the back of the slot then secure to chassis with bracket installed in step 1.
3. Connect a Cat5e (or Better) Ethernet cable to the RJ45 port of the LC-MCGxx-XX series converter. (This port is auto-negotiating and auto-crossover)
4. Connect the other end of the Cat5e (or better) Ethernet Cable into your network device (Switch, Router, PC, etc.)
5. Remove the dust cover plugs from the duplex fiber port.
7. Identify the TX and RX legs of your duplex fiber optic cable and then match them up with the SFP transceiver module. Insert the appropriate legs into the SFP Module.
8. Insert the other end of the fiber optic cable into your remote network device or 2nd media converter making sure to keep track of which ones are the TX & RX legs.
9. Check the LED's to verify that the Power LED is lit. If not, check that the converter is properly seated onto the DC power connection in the chassis and that the chassis power supplies are plugged in and turned on.
10. Check the Network connection LED's to make sure you are connected and able to transmit data.

Packing List

The box should contain the following items:

- (1) LC-MCxx-XX 10/100/1000TX to Duplex SC or ST (See Order Chart below for details)
- (1) AC-DC Power Adapter (Output: 5VDC, 2 Amps max.) For standalone use
- This User's Manual

Please notify us immediately if any items are missing or damaged.

Overview

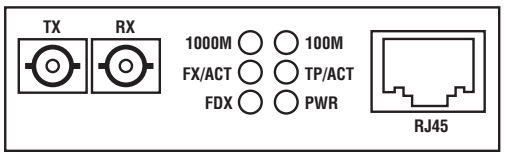
The LC-MCGxx-XX series of media converters are designed to meet the various needs for extending network segments and is able to extend a copper based network via fiber cable to a maximum distance up to 20km. (Depending on which unit you purchase)

Our LC-MCGxx-XX series of media converters are fully compliant with IEEE802.3, IEEE802.3U, IEEE802.3ab, 10/100/1000Base-Tx, and IEEE802.3z 1000Base-SX/LX, standards. They can be used as standalone converters or installed into one of our LC-MCC14AA 14 slot Media Converter chassis. Operation status can be locally monitored through a set of diagnostic LEDs located on the front panel.

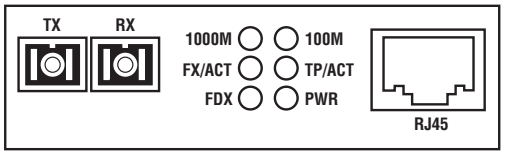
(See LED indicators Chart for Details)

Features

- 10/100/1000Base-Tx to 1000Base-SX/LX Converter
- Complies to IEEE802.3, IEEE802.3U, IEEE802.3ab & IEEE802.3z
- One 10/100/1000 Mbps RJ45 Ethernet port (maximum segment length 100 meters)
- One Duplex ST or SC port (depending on unit purchased, see order chart below for details)
- Auto MDI/MDI-X support on RJ45 port
- Flow control: IEEE802.3x flow control for duplex mode, backpressure flow control for half duplex mode.
- Status LEDs for easy monitoring of device's status
- Extends distance up to 2km (6,561ft or 1.2 miles) when using either of our LC-MCGMM-XX multimode fiber units or up to 20km (65,616ft or 12.4 miles) when using either of our LC-MCGSM-XX single mode fiber units. (See Order Chart below for details)



Duplex ST port version



Duplex SC port version

Ordering Chart

LC-MCGMM-ST	10/100/1000TX RJ45 to 1000SX Multimode Duplex ST (2Km)
LC-MCGMM-SC	10/100/1000TX RJ45 to 1000SX Multimode Duplex SC (2Km)
LC-MCGSM-ST	10/100/1000TX RJ45 to 1000LX Single mode Duplex ST (20Km)
LC-MCGSM-SC	10/100/1000TX RJ45 to 1000LX Single mode Duplex SC (2Km)

Specifications

ITEM	SPECIFICATION
Ethernet Standards	IEEE802.3: 10Base-T IEEE802.3u: 100Base-TX IEEE802.3ab: 1000Base-T IEEE802.3z: 1000Base-SX/LX (Depending on Unit purchased) IEEE802.3x: Flow control and back pressure
Ethernet Port	Cat-5e (or better) (10/100/1000Mbps) unshielded twisted pair cable (100m Max)
Fiber Port	Duplex ST or Duplex SC
LEDs	PWR, TP/ACT, 100M, 1000M, FX/ACT, FDX
Power	External 5VDC 2A
Dimensions	3.7L x 2.79W x 1H (95mm x 71mm x 26mm)
Safety	UL certified
Temperature	Operating: 32°~113°F (0°~45°C) Storage: 14°~158°F (-10°~70°C)
Humidity	Operating: 10~90% (non-condensing) Storage: 10~90% (non-condensing)
EMC	FCC Part 15 (Class B) CE EMC (Class A)

LED Indicators

LED	FUNCTION	STATUS	DESCRIPTION
PWR	Power LED	ON	Power is ON
		OFF	Power OFF
TP/ACT	UTP interface link/action status	ON	10M Copper Cable Link or Better connected
		Blink	Copper port is transmitting data
		OFF	No Cable connected or No Network Connection
100M	Copper interface speed	ON	Copper port Network Connection speed at 100M
1000M	Copper interface speed	ON	Copper port Network Connection speed is at 1000M
FX/ACT	Fiber interface link/action status	ON	Fiber Optic Network connection is present
		Blink	Fiber Optic port is transmitting data
		OFF	Fiber is disconnected or no Network Connection
FDX	Copper interface duplex mode	ON	Full duplex
		OFF	Half duplex