

1000Base-T to 1000Base-X Gigabit Ethernet Converter Module User's Manual

(620-1241-000)

1. Overview

The MGCR1000 Series is designed to convert between 10/100Base-TX and 100Base-FX Fibre Ethernet. The converter module is designed to be installed into the MCR12 Managed Media Converter Chassis.

2. Checklist

Before you start installing the Converter, verify that the package contains the following:

— The TP-Fibre Converter Module

— This User's Manual

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.



Fig. 1 Converter Module Front Panel

3. Model Description

Model	Description
MGCR1000SC	1000Base-T to 1000Base-X Converter Module, SC Multi-Mode
MGCR1000SC.10	1000Base-T to 1000Base-X Converter Module, SC Single-Mode 10Km
MGCR1000SC.30	1000Base-T to 1000Base-X Converter Module, SC Single-Mode 30Km
MGCR1000SC.50	1000Base-T to 1000Base-X Converter Module, SC Single-Mode 50Km
MGCR1000BS5.20	1000Base-T to 1000Base-X Converter Module, BiDi SC Single-Mode 20Km, 1550nm
MGCR1000BS3.20	1000Base-T to 1000Base-X Converter Module, BiDi SC Single-Mode 20Km, 1310nm

4. Installing the Converter

Note: Converter modules are hot-swappable.

- ⇒ Wear a grounding device for electrostatic discharge.
- ⇒ Unscrew and remove the cover plate from the converter chassis.
- ⇒ Verify the converter module is the right

model and conforms to the chassis slot.
 ⇒ Slide the module along the two guides in

the slot and fasten the thumb knob, be sure the converter module is properly seated on the slot socket/connector.
 ⇒ Install the media cable for network connection.
 ⇒ Repeat the above steps, as needed, for each module to be installed into slot(s).

Fibre Port	Default: 1000FDX Attach the fibre cable. The Tx, Rx fibre cable must be paired at both ends
TP Port	Attach TP Cat. 5 cable to TP port Mode: 1000Mbps with NWay

5. LED Description

LED	Color	Function
PWR	Green	Lit when +5V power is coming up
FX LNK	Green	Lit when fibre connection is good
TP LNK/ACT	Green	Lit when TP connection is good Blinks when any traffic is present

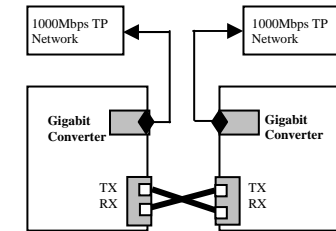


Fig. 2 The Gigabit Converter Connection 1

6. Cable Connection Parameter

- **TP Cable Limitations:** Cat. 5 and above up to 100m

•Fibre Cable Limitations:

1000SX 850nm Multi- Mode	Multi-Mode Fibre 62.5/125µm		Multi-Mode Fibre 50/125µm	
	Bandwidth MHz-Km	Dist.	Bandwidth MHz-Km	Dist.
	160	220m	400	500m
	200	275m	500	550m
	Single-Mode Fibre 9/125µm			
1000LX Single- Mode	1310nm SC is up to 10, 30 Km		Small Form Factor LC by Request	
	1550nm SC is up to 50Km			

8. TP-Fibre Technical Specifications

- **Standards:** IEEE802.3z/AB 1000Base-T, 1000Base-SX/LX

- **UTP Cable:** Cat. 5 cable and up to 100m
- **Fibre Cable:**
 - 9/125µm single-mode
 - 62.5/125µm, 50/125µm multi-mode
- **LED Indicators:**
 - PWR,
 - FX LINK,
 - TP LINK/ACT

- **Data Transfer Rate**

Speed	Forwarding Rate
1000Mbps	1488000 PPS

- **TP :** 1000FDX, NWay auto-negotiation
- **Fibre :** 1000FDX, Nway or Forced mode
- **Power Requirement:** 0.6A@+3.3VDC
- **Ambient Temperature :** 0° to 40°C
- **Humidity :** 5% to 90%
- **PCB Dimensions :** 86(L) * 60(W) mm