

CCD-5100 Media Converter User Manual

1. Overview

IEEE802.3z/AB 100Mbps Ethernet supports two types of media for network connection, 10/100Base-T, and 100Base-SX/LX. The media converter has a switch controller and buffer memory which connects two segments for operation. It comes with an external AC to DC adapter, which provides stable and reliable power.

2. Checklist

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

1. The Fibre Media converter.
2. AC to DC Power Adapter and Cable.
3. The User Manual.

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

3. Models (Connector Types)

- CCD-5100-LC
- CCD-5100-ST
- CCD-5100-SC

4. LED Description

There are six LED lights at the front of the Media Converter

LED	Function
FX100	Lit when FX 100Mbps is operational.
FX Link / ACT	Lit when fibre connection with device is stable. Blinks when FX traffic is present.
Power	Lit when DC power is available.
FDX	Lit when TP full-duplex mode is active. Blinks when collision signal is present.
TX 100	Lit when 100Base-TX is active.
TX Link / ACT	Lit when TP cable connection with device is stable. Blinks when TX traffic is present.

5. Fibre Technical Specifications

	100Base-SX	100Base-LX-10
Connector	LC/ST/SC	LC/ST/SC
Fibre type	Multi-mode	Single-mode
Wavelength	1310nm	1310nm
Max Distance	2km	10km
Min TX PWR	-20.0dBm	-15.0dBm
Max TX PWR	-12.0dBm	-7.0dBm
Sensitivity	< -31.0dBm	< -32.0dBm
Link Budget	11.0dBm	15.0dBm

	100Base-LX-40	100Base-LX-80
Connector	LC/ST/SC	LC/ST/SC
Fibre type	Single-mode	Single-mode
Wavelength	1310nm	1550nm
Max Distance	40km	80km
Min TX PWR	-8.0dBm	-5.0dBm
Max TX PWR	-3.0dBm	0dBm
Sensitivity	< -33dBm	< -25dBm
Link Budget	25.0dBm	20.0dBm

6. Installing the Converter

1. Attach fibre cable from the Converter to the fibre network. The fibre connections must be matched: transmit socket to receive socket.
2. Attach a UTP cable from the TP network device to the RJ45 port on the Converter.
3. Connect the power cord to the Converter and check that the Power LED light is on. The TP ACT and FX ACT LEDs will turn on when all the cable connections are satisfactory.

7. Technical Specifications

The Converter conforms to the following standards:

- **Standards:** - IEEE 802.3z/AB 10/100Base-T
- 100Base-SX/LX
- **UTP Cable:** CAT5/6 Ethernet cable up to 100m.
- **Fibre Cable:**
100SX: 50/125, 62.5/125µm multi-mode.
100LX: 9/125µm single-mode.
- **Data Transfer Rate:**
200Mbps for full-duplex at 100Mbps speed.
- **LED Indicators:**
TP ACT, FDX, 10, 100, Power, FX ACT
- **TP Flow Control:** NWAY auto-negotiation
Fibre Flow Control: NWAY at full-duplex mode
- **Power Requirement:** I/P:100-240Vac, 50/60Hz
2A; O/P:5-12Vdc, 1A (Approved PSU)
- **Ambient Temperature:** 0 ~ 50°C
- **Humidity:** 5% ~ 90%
- **Dimensions:** 26×70×94mm (H×W×D)

CCD-5100 (LC/ST/SC)
10/100Mbps Media Converter

User's Manual

