# CCD-7100 Media Converter User Manual

#### 1. Overview

IEEE802.3z/AB 1000Mbps Gigabit Ethernet supports two types of media for network connection, such as 10/100/1000Base-T and 100/1000Base-SX/LX. The media converter is designed with a switch controller and buffer memory that connects two segments for operation. It has an external AC to DC adapter, which provides stable and reliable power.

#### 2. Checklist

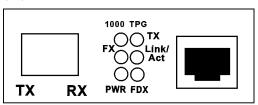
Before installing the Converter, verify that the package contains the following:

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

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

## 3. LED Description

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



1000	Lit when FX speed is 1000Mbps		
TPG	Lit when TP speed is 1000Mbps		
TP Act	Lit when TP connection is good.		
	Blinks when TP data is transmitting.		
TP FDX	Lit when TP full-duplex mode is active		
	Off when TP half-duplex mode is active.		
	Blinks when collision signal is present.		
FX Act	Lit when FX connection is good.		
	Blinks when FX data is transmitting.		
PWR	Lit when +5-12V power is on.		

#### 4. Dip Switch Setting

SW1	ON	Enable Link Fault Pass-Through	
	OFF	Disable Link Fault Pass-Through	
SW2	ON	Converter mode (9k)	
	OFF	Switch mode	
SW3	ON	Flow control enable	
	OFF	Flow control disable	
SW4	ON	FX Speed 100Mbps	
	OFF	FX Speed 1000Mbps	

## 5. Fibre Technical Specifications

	1000Base-SX	1000Base-LX
Connector	LC/ST/SC	LC/ST/SC
Fibre type	Multi-mode	Single-mode
Wavelength	850nm	1310nm
Max	62.5µm: 224m	10Km
Distance	50µm: 550m	
Min TX PWR	-11.0dBm	-9.0dBm
Max TX PWR	-6.0dBm	-5.0dBm
Sensitivity	< -18dBm	< -21dBm
Link Budget	7.0dBm	9.0dBm

	1000Base-EX	1000Base-ZX
Connector	LC/ST/SC	LC/ST/SC
Fibre type	Single-mode	Single-mode
Wavelength	1310nm	1550nm
Max Distance	40Km	80Km
Min TX PWR	-4.0dBm	-3.0dBm
Max TX PWR	0dBm	0dBm
Sensitivity	< -24dBm	< -25dBm
Link Budget	20.0dBm	22.0dBm

## 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 10/100/1000Base-T 100/1000Base-SX/LX
- **UTP Cable:** CAT5/6 Ethernet cable up to 100m.
- Fibre Cable:

1000SX: 50/125μm or 62.5/125μm multi-mode. 1000LX/EX/ZX: 9/125μm single-mode.

Data Transfer Rate:

2000Mbps for full-duplex at 1000Mbps speed.

LED Indicators:

TP ACT, FDX, TPG, 1000, 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)

ullet Ambient Temperature: 0  $\sim 50^{\circ}{
m C}$ 

• Humidity:  $5\% \sim 90\%$ 

• **Dimensions**: 26×70×94mm (H×W×D)

#### 8. Fibre Connector Models:

CCD-7100-LC Fibre: LC/UPC	CCD-7100-ST Fibre: ST/UPC	CCD-7100-SC Fibre: SC/UPC
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CCD-7100 (LC/ST/SC)

Gigabit Media Converter

**User's Manual** 

