



UCT6131-S20/S40/S60

UCT6155-S20/S40/S60

**Single Fiber Converter**

**10/100Base-TX to 100Base-FX (WDM)**

#### FEATURES

- WDM technology combine two fiber cables into one single fiber
- Greatly save the installatin cost of expensive fiber cable
- 1310nm and 1550nm models must be installed in pair
- Transmit wavelength 1310nm at one end and transmit wavelength 1550nm at the other end
- Complies with IEEE802.3u, 10/100Base-TX, 100Base-FX standards
- Supports NWay protocol for speed (10/100Mbps) and duplex mode (Half/Full) detection
- CAT 5 UTP cable up to 100 meters
- Fiber optic cable up to 20 Kilo meters
- 40 Km and 60Km models are available
- Standalone or composite application with fiber converter chassis

#### OVERVIEW

The Single Fiber Converter is designed with an optic Wavelength Division Multiplexing (WDM) technology that transports bi-directional full duplex signals over a single fiber simultaneously. This is a great help to the network planner simply double backbone capacity or to save the installation cost of expensive fiber cables.

UCT6131 and UCT6155 is a pair of Fast Ethernet 10/100Base-TX to 100base-FX WDM (Wavelength Division Multiplexing) Single Fiber Converter supports two types of media for network connection such as 10/100Base-TX unshielded twisted pair and 100Base-FX Fiber optics.

This converter can be used as a standalone unit or as a slide in module to EUSSO Fiber Converter Chassis (up to 10 units per chassis) for use at a central wiring closet.

## SPECIFICATIONS

Hardware Specifications		
Standards	IEEE802.3u 100Base-TX/100Base-FX IEEE802.3 10Base-T	
Wavelength	1310nm Model: Transmit (TX) 1310nm, Receive (RX) 1550nm 1550nm Model: Transmit (TX) 1550nm, Receive (RX) 1310nm	
Fiber Port	SC Single Fiber port x 1	
TP Port	RJ-45 UTP/STP port x 1	
UTP Cable	CAT 5 cable for 10/100Mbps and up to 100-meter	
Single Fiber Cable	Recommended: 9/125 $\mu$ m single mode Optional: 8.3/125, 8.7/125, or 10/125 $\mu$ m single mode	
LED Indicators	FX LNK/ACT (Green)	Light when fiber connection is good Blink when fiber data is present
	FX 100 (Green)	Light for fiber 100Mbps operation
	FX FDX/COL (Amber)	Light when full-duplex mode is active Off when half-duplex mode is active Blinking when collision is present
	TP LNK/ACT (Green)	Light when twisted pair connection is good Blink when twisted pair data is receiving
	TP 100 (Green)	Light when twisted pair speed is 100Mbps Off when twisted pair speed is 10Mbps
	PWR (Green)	Light when 5V power is applied
Data Transfer Rate	100Mbps: 148,800 pps 10Mbps: 14,880 pps	
Flow Control	IEEE802.3x for full duplex Back pressure flow control for half duplex	
MAC address Table	1K entries self-learning	
Buffer Memory	128K byte	
Slide Switch	DTE / MPR switch x 1 (DTE pin-outs is already crossover on board)	
Power Requirement	1A @ 5VDC from AC-DC Adapter (Full load consumption 700mA maximum)	
Dimension	26.2 (H) x 70.3 (W) x 94 (D) mm	
EMC Complaint	FCC Part 15 Class A and CE Mark	
Environment	Operating Temperature: 0° ~ 50°C Storage Temperature: -25° ~ 70°C Humidity: 5% ~ 90% non-condensing	

### WDM Single Fiber Converter Application Diagram



The 1310nm and 1550nm models must be installed in a pair.  
That is to install 1310nm model at one end and 1550nm model at the other end.

## ORDERING INFORMATIONS

Model	Description
UCT6131-S20	10/100M to 100Base-FX Single Fiber WDM Converter 1310nm Single-mode 20Km
UCT6155-S20	10/100M to 100Base-FX Single Fiber WDM Converter 1550nm Single-mode 20Km
UCT6131-S40	10/100M to 100Base-FX Single Fiber WDM Converter 1310nm Single-mode 40Km
UCT6155-S40	10/100M to 100Base-FX Single Fiber WDM Converter 1550nm Single-mode 40Km
UCT6131-S60	10/100M to 100Base-FX Single Fiber WDM Converter 1310nm Single-mode 60Km
UCT6155-S60	10/100M to 100Base-FX Single Fiber WDM Converter 1550nm Single-mode 60Km

*EUSSO Technologies, Inc. is a dedicated data communication and networking company. With professional experiences in design, production, marketing and service support, we deliver the full range networking products including Gigabit Ethernet, Fiber Optic, Wireless LAN, Switches, Hubs, LAN cards, PCMCIA adapters, Converter, Transceivers. As well as Internet Telephony Gateway, Print Servers, Internet Sharing Servers and many others.*

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