

# **Unframed Ethernet to E1 Protocol Converter**

**OP-PC-E1-FE-UN** 





Shenzhen Optostar Optoelectronics Co., Ltd 2013. 08(Version 2)



#### Overview

OP-PC-E1-FE-UN provides one unframed 2048K E1 interface and one Ethernet interface to achieve 10/100Base-T Ethernet data transmission on the E1 channel. It is a high performance, self-learning Ethernet bridge. This device is the extension device of Ethernet, using network (PDH/SDH/Microwave) that provide E1 channel to achieve local and remote Ethernet interconnecting with serial interfaces at a lower cost. The device has inter-set loop test function to facilitate the project launching and daily maintenance.

#### **Prduct Features**

- Based on self -copyright IC
- Support unframed mode (2048K) set and can manage the remote device condition, OAM management data did not take up user's timeslot
- ➤ Have the function of E1 interface loop back check, avoid the converter crashed because of interface loop back;
- Have indicator when the device is power-off or E1 line is broken or lose signal;
- Can set the E1 line that not to send the LINK signal to Ethernet interface while E1 line is broken;
- The Ethernet interface supports jumbo frames (2036 Bytes);
- Inter-set dynamic Ethernet MAC address (4,096) with local data frame filtering
- Ethernet interface supports10M/100M, half/full duplex auto- Negotiation and AUTO-MDIX(crossed line and straightly connected line self-adaptable);
- Have Ethernet monitor self-reset function, the equipment will not dead
- Can achieve the remote device setting any 5 mode of Ethernet and can closed the AUTO-MDIX function;
- Provide 2 clock types: E1 master clock and E1 line clock;
- > The local device can forced the remote device rate follow it(when the device is unframed mode, that is invalid)
- Have three Loop Back Mode: E1 interface Loop Back (ANA) Ethernet interface Loop Back(DIG) Command the remote Ethernet interface Loop Back(REM)
- Provide 2 impedances: 75 Ohm unbalance and 120 Ohm balance;
- Support SNMP Network Management;
- Can realize monitor of remote equipment temperature and voltage from local equipment;
- Can form the structure: Ethernet E1 Bridge(A) -E1 Optical Fiber Modem(B) -Ethernet Optical Fiber Modem (C)
- ➤ Can form the structure: Ethernet E1 Bridge(A) —-Optical Ethernet Modem(B) —-Ethernet Optical Fiber Transceiver (C),can manage (B) and (C) at (A)

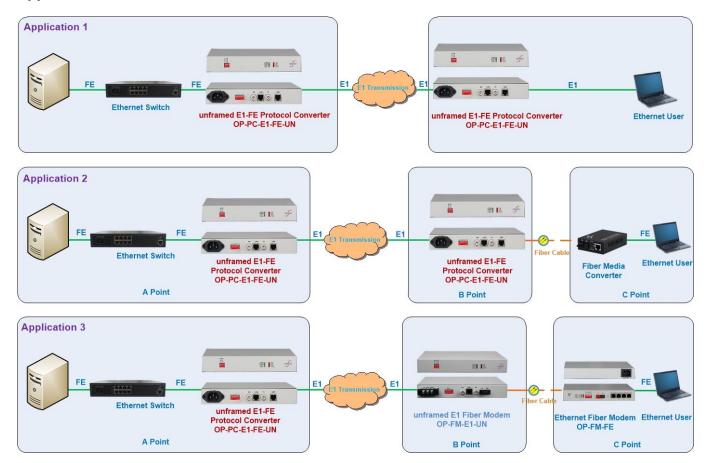


### **Technical Parameter**

OP-PC-E1-FE-UN Unframed Ethernet to E1 Protocol Converter  Ethernet interface (10/100M)		
Interface Standard	Compatible with IEEE 802.3, IEEE 802.1Q (VLAN)	
MAC Address Capability	4096	
Connector:	RJ45, support Auto-MDIX	
E1 Interface		
Interface rate	n*64Kbps±50ppm	
Interface Standard	comply with protocol G.703	
Interface Code	HDB3	
E1 Impedance	75 $\Omega$ (unbalance), 120 $\Omega$ (balance)	
Jitter tolerance	In accord with protocol G.742 and G.823	
Allowed Attenuation	0~6dBm	
Dimension		
Product Size	216X140X31mm(WXDXH)	
Simple packaging	274X193X84mm(WXDXH)	
Piece Weight	1.2KG	
Operation Environment		
Operating temperature	0°C~50°C	
Storing temperature	-40°C~+70°C	
Relative humidity	95 %	
No causticity and solvent, du	ust free, and no strong magnetic interference.	
Power		
Voltage	AC180V ~ 260V; DC -48V; DC +24V	
Consumption	≤10W	
Warranty	2 Year Warranty, Life-time Maintenance	



### **Application**



#### **Order Information**

Model	Description
OP-PC-E1-FE-UN	Unframed Ethernet to E1 Protocol Converter

## Package include

No	Package List	
1	Unframed Ethernet to E1 Protocol Converter	
2	User Guide	
3	Warranty Card	

### **Important Notice**

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