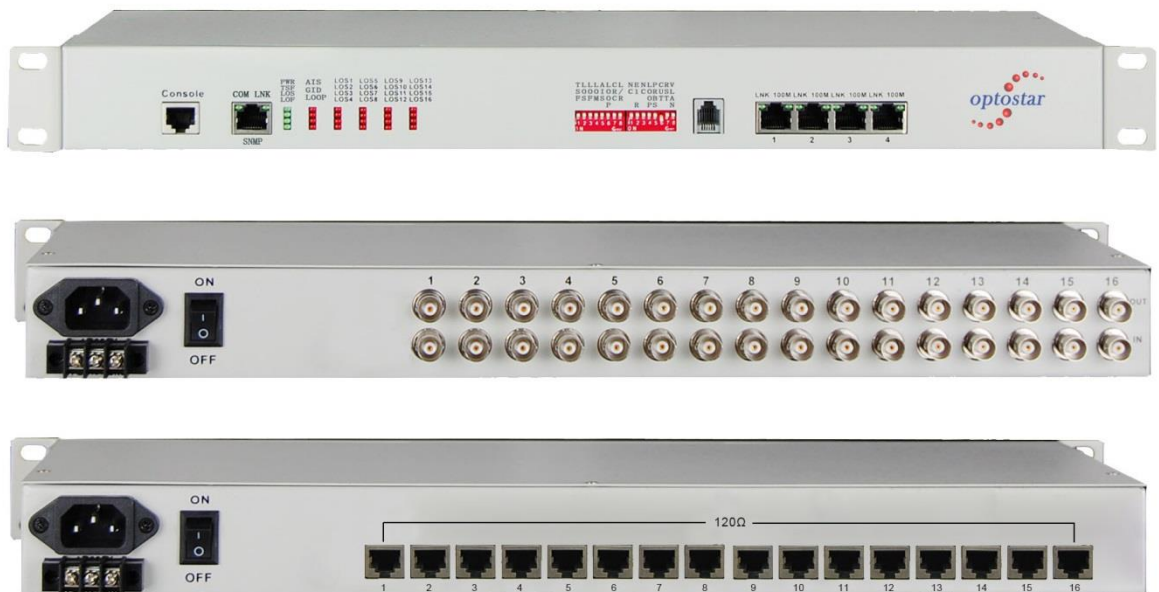




## 4 Ethernet to 16 E1 Protocol Converter

OP-PC-16E1-4FE



Shenzhen Optostar Optoelectronics Co., Ltd

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## Overview

OP-PC-16E1-4FE 4 Ethernet to 16 E1 Protocol Converter using reverse direction multiplexing technology to bundle for multiple E1 circuits to transmit the Ethernet data of 4Channel 100BASE-TX. It can realize 1~16 E1 channel to convert between Ethernet optical interface, to make E1 channels interconnected with Ethernet optical interface. Using GFP encapsulation, support the LCAS (link capacity adjustment scheme) and LAPS protocol. this device can support 1-16Channel E1 channel configuration, can automatically detect the number of E1 and select the E1 available. It allows E1 lines transmission time, 1channel/4channel/8channel/16channel Ethernet bandwidth is 1984Kbit/s,7936Kbit/s,15872 Kbit/s,31744Kbit/s.

OP-PC-16E1-4FE provides alarm function. The work is reliable, stable, and low power consumption, high integration, small size. Support Network management , The main function of network management system is to fulfill the inquiry for local and remote devices and configuration management including inquiry of alarm status on E1 line, Ethernet working status, and loopback control etc.

## Product Features

- Transparent transmission of Ethernet data in 1 to 16 E1 circuits;
- Can be equipped with four Ethernet switching electrical interface for the user to save an Ethernet switch;
- Ethernet 10 / 100M, full / half duplex fully adaptive, support VLAN protocol;
- Each port supports Ethernet support AUTO-MDIX (crossover cable and straight-line adaptation);
- Ethernet interface is also optional optical interfaces to achieve optical Ethernet data transmission through the interconnection E1 far;
- 16-channel E1 lines, the maximum delay difference between any two can reach 220ms; when the delay difference over 220ms, the delay will produce poor overrun alarm, while business interruption;
- Built dynamic Ethernet MAC address list (4096), with local data frame filtering function;
- E1 interface complies with ITU-T G.703, G.704 and G.823, do not support the use of signaling slots;
- Timer mode, the optional local timing and tracking E1 line timing, E1 line timing source can be automatically switched according to the signal quality. Such as E1 line timing source system for the first Road E1, when the first E1 failure (serious warning LOS / AIS / LOF / CRC4 or signal generating loopback) and the second path E1 is working properly, the system will automatically switch to the track The second road E1; elimination of the fault, the system then automatically return to the track first road E1;
- Compliance with ITU-T standard protocol, GFP-F encapsulation suggestion G.7041, VCAT virtual concatenation and LCAS Link Capacity Adjustment recommendation G.7042, Ethernet mapping to nxE1 recommendation G.7043, Ethernet to single E1 map suggestion G. 8040;

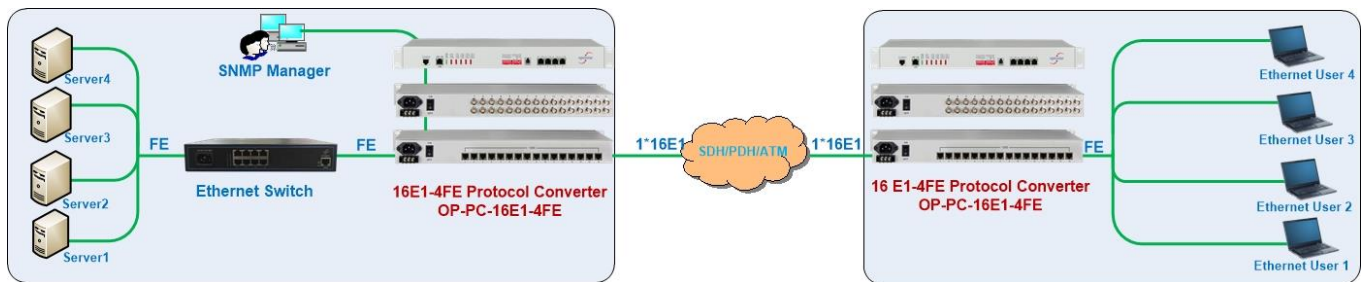
- When transmission bandwidth increases, will not damage the Ethernet data; transmission bandwidth is artificially reduced, it can also be realized without damaging the Ethernet data network;
- E1 tributary ends may not correspond by serial connection;
- When a single slip direction E1 fails, the other direction can still work;
- E1 signal loop back and cut off the automatic detection function: When detecting the occurrence of a road E1 signal loop, the system cut off this E1; loopback released, E1 automatic recovery use this road;
- Complete alarm indication, choose to display local / remote alarm;
- Supports remote E1 line side loopback function to facilitate the testing of E1 lines;
- Support local system for the remote system reset;
- provide remote interface loopback command, easy to line maintenance;
- Console management interface provides for easy installation opening;
- Configuration network management module, support independent SNMP network management;
- with this end in view the working status of remote device display function;
- Multiple power mode options: AC220V, DC-48V / DC24V and the like;
- DC-48V / DC24V power supply with automatic polarity detection function, when installed without distinction between positive and negative.

**Technical Parameter**

<b>OP-PC-16E1-4FE Framed 4 Ethernet to 16 E1 Protocol Converter</b>	
<b>Ethernet interface (10/100M)</b>	
Interface rate	10/100 Mbps, half/full duplex auto-negotiation
Interface Standard	Compatible with IEEE 802.3, IEEE 802.1Q (VLAN)
MAC Address Capability	4096
Connector:	RJ45, support Auto-MDIX
<b>E1 Interface</b>	
Interface rate	n*64Kbps±50ppm
Interface Standard	comply with protocol G.703

Interface Code	HDB3
E1 Impedance	75 Ω (unbalance), 120 Ω (balance)
Jitter tolerance	In accord with protocol G.742 and G.823
Allowed Attenuation	0~6dBm
<b>Dimension</b>	
Product Size	19 inch 1U 485X138X44mm(WXDXH)
Piece Weight	1.8KG
<b>Operation Environment</b>	
Operating temperature	0°C~50°C
Storing temperature	-40°C~+70°C
Relative humidity	95 %
No causticity and solvent, dust free, and no strong magnetic interference.	
<b>Power</b>	
Voltage	AC180V ~ 260V; DC -48V; DC +24V
Consumption	≤10W
<b>Warranty</b>	2 Year Warranty, Life-time Maintenance

**Application**



**Order Information**

Model	Description
OP-PC-16E1-4FE	4 Ethernet to 16 E1 Protocol Converter

**Package include**

No	Package List
1	4 Ethernet to 16 E1 Protocol Converter
2	User Guide
3	Warranty Card

**Important Notice**

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