

nE1/Ethernet Protocol Converter



GWPCnE1-ETH converter uses reverse multiplexing technology to transmit 10/100BaseT data with bonding several E1 circuits, thus realizing conversion from n E1 channels ($n=1/4/8$) to Ethernet interface. It can transmit signals point-to-point from E1 channel to RJ45 interface to realize connection between E1 channel and Ethernet. Different from general long-distance bridge, GWPC converter supports flexible configuration of 1 to 8 E1 channels and can detect the number of E1 channel and choose available channel. In the meantime, a certain difference of transmitting time-extension is allowed among E1 circuits. Line rate is 1968Kbit/s for one E1 channel and the bandwidth can reach $n*1968$ Kbit/s for n E1 channels. nE1 to 100Base-FX Fast Ethernet Fiber port is available upon request.

Features:

- | Transparent transmission of Ethernet data in nE1 circuits;
- | Ethernet interface 10/100M, half/full duplex, self adaptable, supporting VLAN;
- | Allowing 10ms transmitting time delay for E1 channels. When the delay exceeds the allowed range, system can stop transmitting data automatically on E1 with a long time delay;
- | Providing 2 kinds of loop-return function: E1 self-looping at local end, E1 loop-return from remote end;
- | Ethernet MAC address table (capacity:4096) is set inside with local data frame filtering;
- | E1 interface conforms to ITU-T G.703, G.704 and G.823
- | E1 interface module includes built-in clock recovery circuit and HDB3 code circuit;
- | Supporting flexible configuration of 1/4/8 E1 channels, can detect the number of E1 channels and time delay and choose available E1 channel automatically when resetting;
- | Supporting remote system resetting from local system;
- | Built-in self-reset function of Ethernet monitoring

Specifications:

E1 interface:

Interface standard: Compliant with G.703 standard

Interface rate: 2.048Mbit/s \pm 50ppm

Supports HDB3 Encoding

Jitter meeting G.742 and G.823 standards

Transmission capacity: 1*E1

Clock type: internal-clock, route clock

Connector: BNC (75 Ω), RJ45 (120 Ω)

Interface impedance: 75 Ω (non-balanced), 120 Ω (balanced)

Ethernet port:

Interface rate: 10/100Mbps

Duplex: half/full duplex self-adaptable

Interface characteristic: supports IEEE802.3, IEEE802.1Q (VLAN)

Physical interface: RJ45

AUTO-MDIX: supports twisted cable and coaxial cable self-adaptable

MAC address table: auto learning 4096 MAC addresses

Environment:

Input voltage: AC 90~265V; DC -48V

Power consumption: ≤5W

Dimension: 483mm × 160mm × 44mm

Operating temperature: 0°C ~ 50°C

Relative humidity: 5 ~ 95 % non-condensing

Ordering Information

GWPCnXY-AB (nE1 to Ethernet Protocol Converter)

n (E1 number): 1_1 E1, 4_4 E1, 8_8 E1

X (Original Data): 1_E1, 2_Ethernet

Y (Destination Data): 1_E1, 2_Ethernet

AB (Power Supply): 220_220V AC, 48_-48V DC