

### Interface Converter

## **MW70E**

◆ Framed E1-FE Converter

### Features

- Based on self -copyright IC
- E1 supports any timeslot set, the rate is 64K-2048K
- The local device can forced the remote device rate follow it
- Can realize monitor and control of remote equipment, OAM management data did not take up user's timeslot and save E1 bandwidth
- 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;
- 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;

#### Introduction

This interface converter is based on FPGA, providing one framed 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.

## Specification

| E1 Interface       |   |
|--------------------|---|
| Interface Standard | comply with protocol G.703              |
| Interface Rate     | n*64Kbps±50ppm                          |
| Interface Code     | HDB3                                    |
| E1 Impedance       | 75Ω (unbalance), $120Ω$ (balance)       |
| Jitter tolerance   | In accord with protocol G.742 and G.823 |

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| A.0 M<br>N ≤ E<br>A.0 M | LINK COP |
|-------------------------|----------|
|                         |          |
|                         |          |
|                         |          |

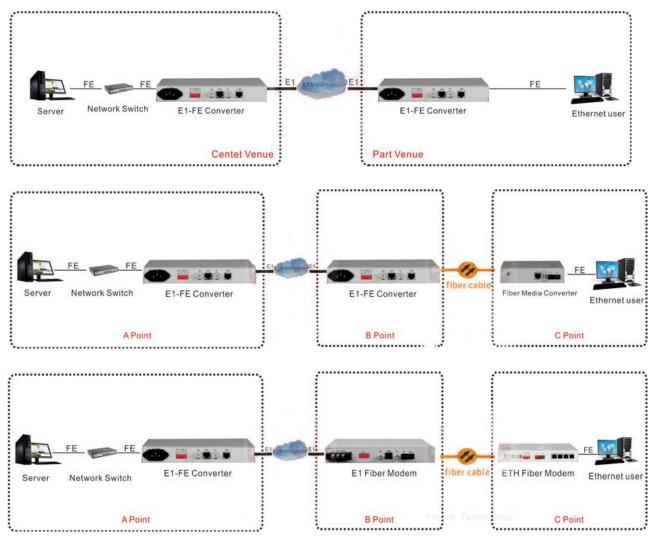


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| Allowed Attenuation          | 0~6dBm   |
|------------------------------|--|
| Ethernet interface (10/100M) |  |
| Interface rate               | 10/100 Mbps, half/full duplex auto-negotiation |
| Standard                     | Compatible with IEEE 802.3, IEEE 802.1Q (VLAN) |
| MAC Address Capability       | 4096   |
| Connector                    | RJ45, support Auto-MDIX                        |
| Power                        |  |
| Power supply                 | AC180V ~ 260V; DC-48V; DC +24V                 |
| Power consumption            | $\leq 10 W$                                    |
| Dimension                    |  |
| Product Size                 | 216*140*31mm(W*D*H)                            |
| Simple packaging             | 274*193*84mm(W*D*H)                            |
| Piece Weight                 | 1.2KG  |
| Working environment          |  |
| Working temperature:         | $-10^{\circ}$ C ~ $50^{\circ}$ C               |
| Storage temperature          | $-40^\circ \text{C} \sim 80^\circ \text{C}$    |
| Humidity                     | $5\% \sim 95\%$ (no condensation)              |
| Warranty                     | 3 years  |

# > Application



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# > Order information

| Model NO. | Description                                |
|-----------|--|
| MW70E     | Framed E1-FE Converter, AC220V or DC48V    |
| MW80E     | Unframed E1-FE Converter, AC220V or DC48V  |
| MW70E4    | Framed E1-4FE Converter, AC220V or DC48V   |
| MW80E4    | Unframed E1-4FE Converter, AC220V or DC48V |
| MW704E4   | 4E1-4FE Logical Isolation, AC220V or DC48V |
| MW708E4   | 8E1-4FE Logical Isolation, AC220V or DC48V |