



## ◆ E1-RS485 Converter

### ➤ Features

- Based on self -copyright IC
- Can automatically detect and control RS-485 data flow without handshake signals to control the flow direction of data
- Have the ability to automatically detect the baud rate of serial port signal
- Automatically test the reason of the device matt is that the device is power off, or E1 line is broken. And then indicate on the LED.
- Serial port interface lightning-protection reached IEC61000-4-5 (8/20 $\mu$ S) DM(Differential Mode): 6KV,Impedance (2 Ohm),CM(Common Mode): 6KV, Impedance (2 Ohm) standard
- Provide 2 impedances: 75 Ohm unbalance and 120 Ohm balance;
- Support SNMP Network Management;
- Serial channel can transmit adaptable serial data asynchronously 300 Kbps-921.6Kbps baud rate
- Serial data multiplexing in E1 support ITU-T R.111 jumping coding mode



### ➤ Introduction

This interface converter is based on FPGA, providing one E1 interface and one RS485 serial interface, 1Channel RS485 transmission via E1 interface. The product breaks through contradictions between traditional serial interface communication distance and communication rate, besides, it also can solve electromagnetic interference, ground ring interference and lightning damage. The device greatly improves reliability, security and confidentiality of data communication. It is widely used for various industrial control, process control and traffic control occasions, especially for Bank, and Power and other sectors and systems which have special requirements of electromagnetic interference environment. Serial interface communication rate is up to 921.6KBPS.

### ➤ Specification

#### E1 interface

Interface Standard	comply with protocol G.703
Interface Rate	2048Kbps $\pm$ 50ppm
Interface Code	HDB3
Impedance	75 $\Omega$ (unbalance), 120 $\Omega$ (balance)
Jitter tolerance	In accord with protocol G.742 and G.823
Allowed Attenuation	0~6dBm

#### Serial interface

Standard	EIA/TIA-485 RS-485 (ISO/IEC8284)
RS-485 4 wires	TXD+, TXD-, RXD+, RXD-, Signal Ground
RS-485 2 wires	Data+(Correspond TX+), Data- (Correspond TX-) , Signal Ground

#### Power

Power supply	AC180V ~ 260V; DC-48V; DC +24V
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Power consumption  $\leq 3W$

### Dimension

Product Size 216\*140\*31mm(W\*D\*H)

Simple packaging 274\*193\*84mm(W\*D\*H)

Piece Weight 1.2KG

### Working environment

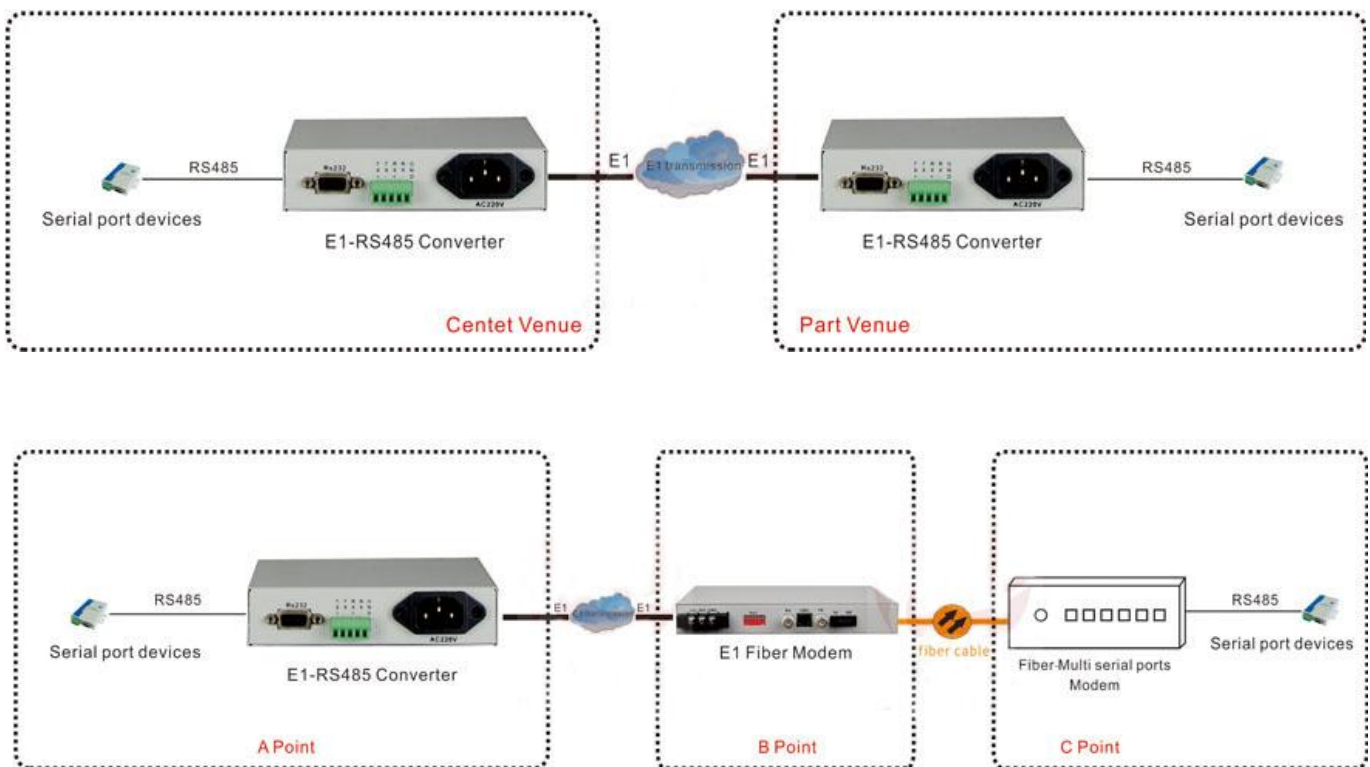
Working temperature:  $-10^{\circ}C \sim 50^{\circ}C$

Storage temperature  $-40^{\circ}C \sim 80^{\circ}C$

Humidity 5% ~ 95% (no condensation)

Warranty 3years

## ➤ Application



## ➤ Order information

Model NO.	Description
MWE10	E1-RS232 Converter, AC220V or DC48V
MWE20	E1-RS422 Converter, AC220V or DC48V
MWE30	E1-RS485 Converter, AC220V or DC48V
MWE50	E1-RS232/422/485 Converter, AC220V or DC48V