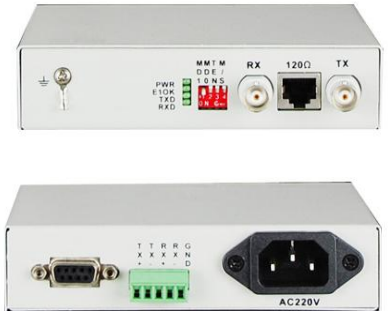# Interface Converter   MWE50

◆ E1-RS232/RS422/RS485 Converter

➢ Features

- Based on self -copyright IC
- Support 3 interfaces RS232,RS422,RS485, you can only use one, cannot use the three interfaces at the same time
- 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 (8/20μS) 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 1Channel RS232/485/422 transmission on 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. RS232/RS485/RS422 channel can transmit adaptable serial data asynchronously 512kbps baud rate.

➢ Specification

E1 interface	
Interface Standard	comply with protocol G.703
Interface Rate	2048Kbps±50ppm
Interface Code	HDB3
Impedance	75Ω (unbalance), 120Ω (balance)
Jitter tolerance	In accord with protocol G.742 and G.823
Allowed Attenuation	0~6dBm
Serial interface	
Standard	EIA/TIA-232 RS-232 (ITU-T V.28)
	EIA/TIA-422 RS-422 (ITU-T V.11)
	EIA/TIA-485 RS-485 (ISO/IEC8284)
RS-232	RXD, TXD, Signal Ground
RS-422	TXD+, TXD-, RXD+, RXD-, Signal Ground

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
Power consumption	≤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°C ~ 50°C
Storage temperature	-40℃～80℃
Humidity	5%～95% (no condensation)
Warranty	3years

➤ Application
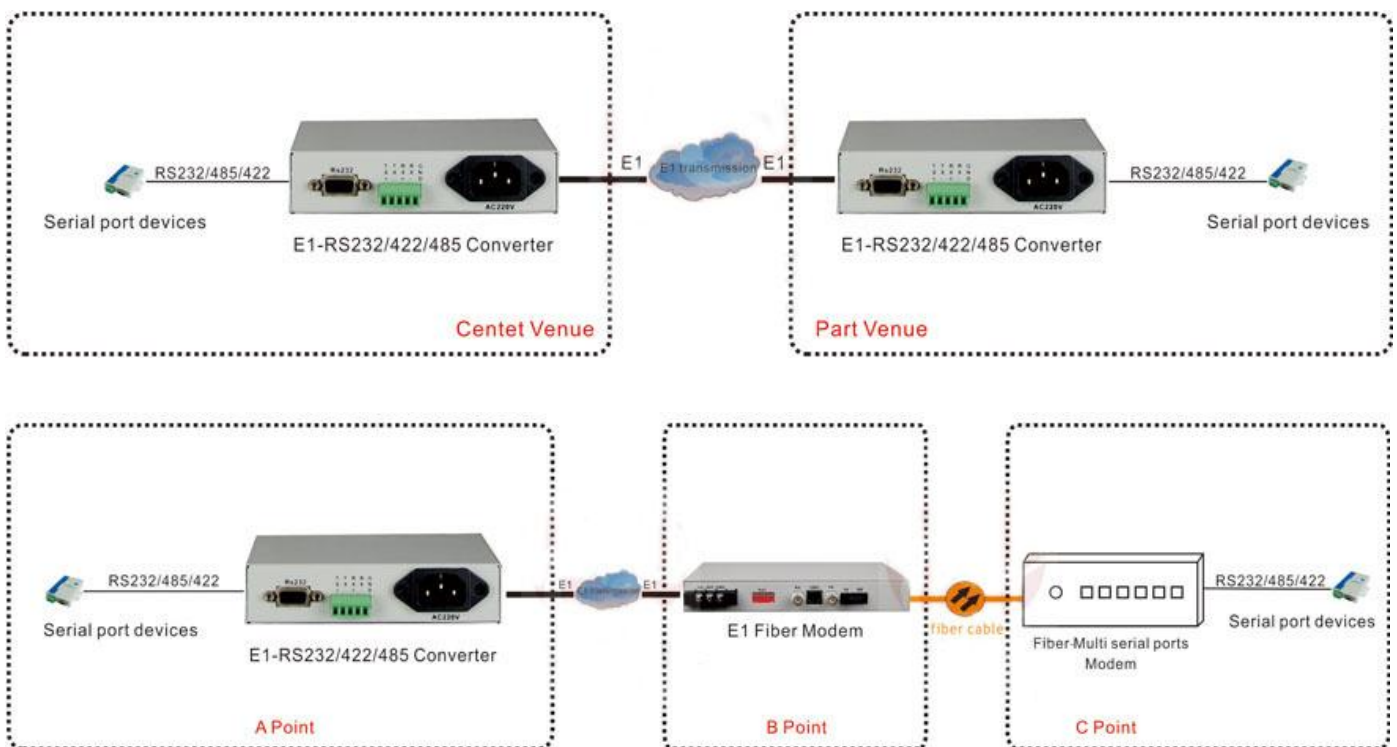
➤ Order information

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