





### **SW485WA**

Passive Pocket RS-232 to RS-485 Interface Converter with Photoelectric Isolation

- Support bidirectional data conversion between 1 RS-232 serial port and 1 RS-485 serial port
- Support 1500V photoelectric isolation
- Unique port-power technology, no need for external power supply
- The rate is up to 38400bps, support 128 nodes
- Automatic serial port signal rate detection, zero-delay automatic forwarding
- Support -40 ~ 80 <sup>o</sup>C wide operating temperature range
- Compact size, easy installation







#### Introduction

SW485WA is an industrial-grade pocket RS-232 to RS-485 interface converter, which can implement bidirectional data conversion between serial port RS-232 and RS-485, and provide 1500V photoelectric isolation protection without the need of external power supply. It provides a RS-232 serial port and a RS-485 serial port equipped with 600W surge protection and 15kV electrostatic protection, which can effectively prevent device from being damaged.

The RS-232 port of SW485WA adopts hole-type DB9 interface, which could connect to PC directly and obtain power from PC serial port via TXD, RTS and DTR signal lines. RS-232/485 bidirectional conversion could be implemented, even though it's only powered by TXD signal. Regardless of whether the signal is high or low, SW485WA can obtain enough power from those data/handshake signals.

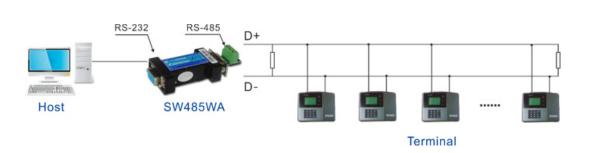
The design of SW485WA complies with the requirements of industrial standard. It could be wildly used in electric power system, industrial automation control and IC card charging system.

### **Specification**

Serial Port	Standard: EIA RS-232C, RS-485 Serial port quantity: 1 RS-232 serial port, 1 RS-485 serial port RS-232 signal: TXD, RXD, GND RS-485 signal: D+, D-, GND Interface type: RS-232 serial port, adopts DB9, Female; RS-485 serial port, adopt 3-pin terminal blocks Transmission distance: RS-232 serial port, 15m; RS-485 serial port, 1200m Direction control: RS-485 adopts automatic data flow control technology which can detect and control data transmission direction automatically Load capacity: RS-485 supports 128-point polling environment Interface protection: 600W surge protection, 15kV electrostatic protection Photoelectric isolation: 1500V		
Power Requirement	No need for external power supply;  Device obtains power from TXD, RTS, DTR signals of RS-232 serial port		
Power Consumption	Static power consumption: ≤20mA  Dynamic power consumption(mean): ≤50mA		

Environmental Limit	Operating temperature: $-40\sim80^{\circ}$ C Storage temperature: $-40\sim85^{\circ}$ C Relative humidity: $5\%\sim95\%$ (no condensation)		
Physical Characteristic	Housing: plastic Dimension (W x H x D): 82mm×33mm×16.5mm Weight: 50g		
Certification	CE, FCC, RoHS		
Warranty	3 years		

# **Typiacal Application**



## **Ordering Information**

Available Models	RS-232	RS-485	Power Supply
SW485WA	1	1	No



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