**SW485WA**

**Port-powered RS-232 to RS-485/422 Converter**

**Features**

1. Optical isolation effectively protects RS-232/RS-485 devices from transient surges, ground loop, and remote lightning
2. Plug-and-Play (Device is hot-pluggable, Data format Auto-sensing & Self-adjusting)
3. Maximum baud rate 38400bps, 1200m(9600bps)
4. Port-powered, no external power or TXD, RTS, DTR required
5. Data direction auto-turnaround, no flow control is required
6. 2500V isolation, no power supply needed

**Introduction**

The SW485WA is an industrial grade bi-directional port-powered 2500V opto-isolated RS232 to RS485 converter in a 9 pin format. It can convert any standard full duplex RS232C port to any two-wire balanced half duplex RS485 port. In simple terms, it will convert any RS232 signal to a RS485 signal and vice versa. The unit is powered from the RS232 data lines. It also supports data direction auto-turnaround. Therefore, no external power or flow control is required. The data direction auto-turnaround automatically enables the RS485 driver when data is present on the RS232 side making the device plug-and-play, requiring no software drivers. The SW485WA has a DB9 female connector on the RS232 side and either a DB9 male connector or 3 bit terminal block on the RS485 side.

**Specification**

- RS-232 signal: TX, RX, GND
- RS-485 signal: D+, D-, GND
- Working mode: Asynchronism, point to point or multi point, 2 wire half-duplex
- Baud rate: 300–115200bps, auto test serial signal rate detect signal speed automatically, zero delay time
- Flow control: Data direction auto-turnaround, no flow control is required
- Transfer distance: RS-485 side: 1.2Km, 9600bps
  - RS-232 side: no less than 5m
- Max number of drops: 128 nodes
- Optical isolation: 2500V
- Port protect: 1500W surge protection, 15KV ESD protection
- Connector: RS-232 side DB9 female

**Power**

- Power input: No power supply need, powered from TXD, RTS,DTR
- Consumption: Static less than 10mA, dynamic less than 40mA

**Environment**

- Operating temperature: -10°C to 60°C
- Storage temperature: -40°C to 85°C
- Humidity: 5% to 95%(no condensation)

**Appearance**

- Dimensions: 95.0mm×33.0mm×16.5mm
- Material: Plastic(shell)
- Weight: 50g

**Warranty:** 5 years

**Approvals:** FCC,CE,RoHS approvals

**Packing List**

1. SW485WA × 1
2. Separate terminal block(DB9F to 3 bit) × 1
3. User manual × 1