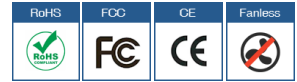


CTSC-014

Port-powered Photoelectric Isolated RS-232 to RS-485 Converter

Features:

- Operating Temperature: -25°C to 70°C
- Isolation Voltage: 2,500 Vrms, 500 VDC (Continuous)
- Baud Rate: 300 - 38,400 bps



Introduction:

The CTSC-014 serial converter provides seamless compatibility between RS-232C and RS-485 standards, converting single-ended RS-232 signals into balanced differential RS-485 signals. The unit features an integrated optical isolator providing 2,500 Vrms isolation, while advanced Transient Voltage Suppressors (TVS) protect the RS-485 interface from electrical surges.

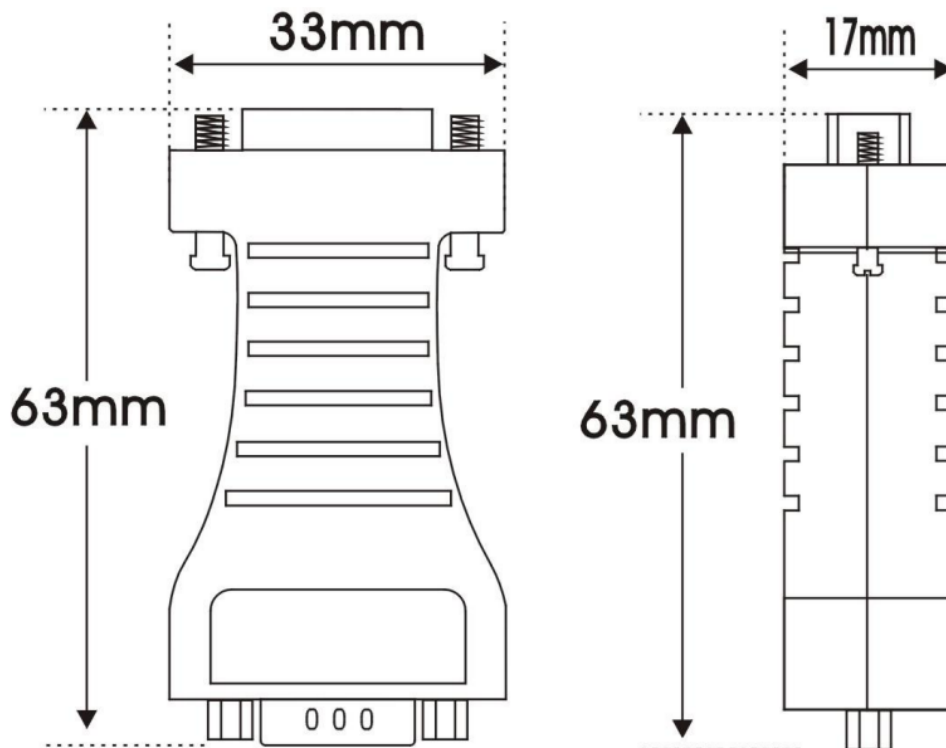
Designed with zero-delay automatic transceiver switching, the converter's unique I/O circuitry manages data flow direction automatically—eliminating the need for hardware handshake signals (such as RTS or DTR). This ensures the CTSC-014 is fully compatible with all existing communication software and hardware, requiring no software modifications to legacy RS-232 systems.

The CTSC-014 provides reliable connectivity for both point-to-point and point-to-multipoint configurations. In multipoint mode, the converter supports up to 32 RS-485 devices with data rates ranging from 300 to 38,400 bps.

Specification:

Hardware	
Interface Standard	Complies with EIA/TIA RS-232C and RS-485 Standards
Electrical Interface	DB9 Female Connector for RS-232 Port, DB9 Male Connector for RS-485 Port
Interface Protection	±15 kV ESD Protection for RS-232 Interface 600 W Surge Protection per wire for RS-485 Interface
Isolation Voltage	2,500 Vrms, 500 VDC (Continuous)
Operating Mode	Asynchronous Half-duplex
Transmission Media	Twisted-pair (UTP) or Shielded Cable (STP)
Transmission Distance	1.2 km at 9,600 bps; 300 m at 38,400 bps
Dimension	63 x 33 x 17 mm
Operating Temperature	-25°C to 70°C
Relative Humidity	5% to 95%

Dimension Drawing:



Ordering Information:

CTSC-014

RS-232 to RS-485 Converter with Photoelectric Isolation, Baud Rate: 300 - 38,400 bps, ± 15 kV ESD Protection (RS-232), 600 W Surge Protection per wire (RS-485), Operating Temperature: -25°C to 70°C.

Other Models Are Available Upon Request.