

Serial RS-232/422/485 to Ethernet Twisted Pair Converters



Illustrated: Serial 232 / 422 / 485 to Ethernet converters with twisted pair and fiber connectors

Canary's CSE-D9TX is designed to enable devices with serial ports— Computer Numerical Controllers (CNCs), Programmable Logic Controllers (PLCs), and others—to directly access an Ethernet network. CSE-D9TX Serial to twisted pair Ethernet media converters are a robust connectivity solution that provides full Ethernet and TCP/IP support. The RJ-45 port is an auto-sensing 10/100 Mbps interface that allows serial data generated by remote cameras, industrial machines, scientific measurement instruments, and similar serial devices to easily be distributed over Ethernet for simple, network-based control. With the CSE-D9TX, users can retain their investments in inexpensive serial devices while enjoying the low cost access, ease of use, and data handling power of Ethernet data networks.

Adding flexibility ... advancing network integration

CSE-D9TX

**Serial to
10 / 100 Mbs Twisted
Pair Ethernet**

Features:

**Support serial
asynchronous data
rates to 115.2 Kbps**

**Extended distances
up to 1.2 Km
(24 AWG) using
RS-422/485**

**Meets Ethernet
and Fast Ethernet
specifications**

**IEEE 802.3
(10BASE-T),
IEEE 802.3u
(100BASE-TX)**

***Economic access to
Ethernet for serial-
port devices***



Product Specifications

Standards:

- Ethernet: IEEE 802.3 (10BASE-T); IEEE 802.3u (100BASE-TX);
- Serial: EIA/TIA RS-232E; EIA/TIA-574 EIA/TIA RS-422/485

Ports:

- Ethernet: UTP 100/120 Ohm; RJ-45 type,
- Serial: 9-pin serial connector; D-sub, female DB-9

Max. Distance:

- UTP: 100 meters (Cat 3/4/5.)
- Serial: 15 meters (RS-232); 1,200 meters (RS-422, RS-485)

Data Rates:

- UTP: 10 or 100 Mbps
- Serial: 50 ~ 115.2 kbps (asynchronous)

Signals:

- RS-232: TxD, RxD, CTS, RTS, DTR, DSR, RI, DCD, GND
- RS-422: TxD+/-, RxD+/-, GND
- RS-485: Data+/-, GND

Power Supply:

- Voltage: Input: 120 VAC Output: 12 VDC 800 m Amp
- Frequency: 60 Hz

Emissions:

- FCC Part 15 of Class A; CE Approved

Warranty:

- Three years, parts and labor

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Serial RS 232 / 422 / 485 to Ethernet Twisted Pair Converters

DIP Switches:

- Enables / disables: Console / data communication mode RS-232, RS-422/485 (4-wire), RS-485 (2-wire), Termination resistor (TMR)

Diagnostic LEDs for device status:

- Power, Link, Activity, 100 Mb, System check

Operating Temperature:

- 0° to 55° Celsius; 10% to 80%, non-condensing (Relative Humidity)

Storage Temperature:

- -20° to 70° Celsius; 5% to 90%, non-condensing (Relative Humidity)

Dimensions:

- 4.3" x 2.9" x .92" (109.2 mm x 73.8 mm x 23.4 mm) (LxWxH)

Weight:

- 0.70 lb (0.32 Kg)

The page that follows provides ordering information for Canary's Serial RS-232/422/485 to Ethernet Twisted Pair Converter:

- **Serial to 10 / 100 Mbs Ethernet CSE-D9TX**



Canary Communications is an ISO 9001 : 2000 registered company.



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Serial RS-232/422/485 to Ethernet Twisted Pair Converters

CSE-D9TX – Serial to Unshielded Twisted Pair



Illustrated: Serial 232 / 422 / 485 to Ethernet converter

With a multi-protocol DB-9 connector (RS-232, RS-422, and RS-485), and RJ-45 type 10/100 Mbps Ethernet port for twisted pair connection, the CSE-D9TX media converter facilitates integration of asynchronous network devices with a TCP/IP-based Ethernet network without requiring removal, replacement, or modification of the existing serial cable infrastructure. Twisted-pair transmission at 100 Mbps is 100 meters over Category-5 UTP cable.

The design of the CSE-D9TX allows for easy implementation – essentially, a straightforward "plug-and-go" operation. Additionally, the compact form factor of the device translates into standalone (desktop) or wall-mounted installation flexibility.

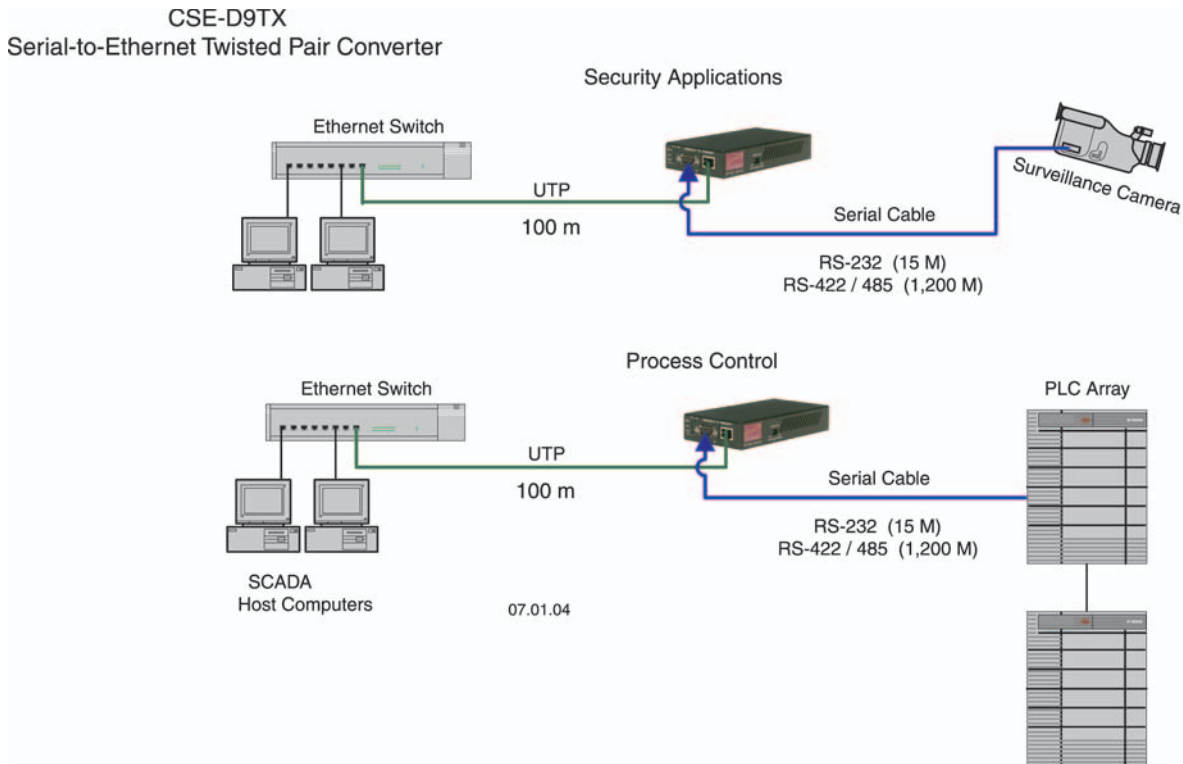
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- Auto-sensing 10/100 Mbps Ethernet interface (RJ-45)
 - Supports serial asynchronous data rates to 115.2 Kbps
 - DIP switch enabled termination resistor
 - Female DB-9 port supports RS-232/422/485 serial interfaces
 - Supports 4 wire full-duplex asynchronous serial data transmission (RS-422/485)
 - Supports 2 wire half-duplex asynchronous serial data transmission (RS-485)
 - Extended distances up to 1.2 km (24 AWG) using RS-422/485
 - Complies with EIA/TIA-232E / 422 / 485 and EIA/TIA-574
 - IEEE 802.3 (10BASE-T), IEEE 802.3u (100BASE-TX)
 - Diagnostic LEDs for device status
 - FCC Class A and CE approved
 - External power supply
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Serial RS-232/422/485 to Ethernet Twisted Pair Converters

CSE-D9TX – Serial to Unshielded Twisted Pair

Ordering Information

Model Number	Function	Protocols	Media Types	Connector Types
CSE-D9-TX	Serial-to-Ethernet Media Conversion	Serial: RS-232, RS-422, RS-485 Ethernet: 10/100 Mbs UTP	Serial: 24AWG Ethernet: 10 Mbs:Cat 3 100 Mbs: Cat 5	DB-9 Serial (Female) RJ-45 auto-crossover



This diagram illustrates typical applications for the CSE-D9TX. The actual distances will depend on several factors including the quality of cables used and the terminal equipment employed.