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

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.
**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, 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)

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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**

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

**CSE-D9TX – Serial to Unshielded Twisted Pair**

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 Mbs is 100 meters over Category-5 UTP cable.

The design of the CSE-D9TX allows for east 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.

- Auto-sensing 10/100 Mbps Ethernet interface (RJ-45)
- Supports serial asynchronous data rates to 115.2 Kbps
- DIP switch enabled termination resister
- 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
Serial RS-232/422/485 to Ethernet Twisted Pair Converters

**CSE-D9TX – Serial to Unshielded Twisted Pair**

### Ordering Information

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

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.