

Serial RS-422/485 Copper to Fiber Converters



Illustrated: RS-422/485 Copper to Fiber converter family.

Canary's CSC-4D9MX (multi-mode) and CSC-4D9S1 (single-mode) family is designed for linking Serial RS-422/485 devices over fiber optic segments. They allow the direct connection of 120 Kbps Serial devices via fiber cable links that are electromagnetic, and radio frequency (RFI) and electrical surge immune. CSC-4D9XX converters are ideal for industrial process control, surveillance, and other remote access applications with RS-422/485 interfaces. These compact stand alone units provide an economic solution for Serial to standard multi-mode and single-mode fiber conversion.

CSC-4D9MX

*Serial to Standard
Multi-mode fiber*

CSC-4D9SX

*Serial to Standard
Single-mode fiber*

Features:

*Supports
asynchronous
data transfer rate
up to 120Kbps*

*Internal DIP switch-
enabled termination*

***Economic linkage of
Serial RS-422/485
devices over fiber
optic networks.***

Installed success ... proven in the field.



Product Specifications

Standards:

- EIA/TIA-422, EIA/TIA- 485

Connectors:

- DB-9 for RS-422/485; ST/SC for Multi-mode fiber; SC, ST for Single-mode fiber

Max. Distance:

- Copper: up to 1200 meters.
- Fiber: 2000 meters (Multi-mode)
30 kilometers (Single-mode)

Power:

- Input Voltage: 120 VAC
- Output: 12 VDC 800 mA
(External power adapter)
- Frequency: 60 Hz

Environment:

- Operating:
Temperature: 0°C to 50°C
Relative Humidity: 10% to 80%,
non-condensing
- Storage:
Temperature: -20°C to 70°C
Relative Humidity: 5% to 90%,
non-condensing

Emissions:

- FCC Part 15 of Class A & CE approved

Dimensions:

- 4.3x 2.9x .95 inches [109.2 x 73.8 x
23.4mm] (L x W x H)

Weight:

- 0.33 Lb (0.15 Kg)

Warranty:

- Three years, parts and labor

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Serial RS-422/485 Copper to Fiber Converters



Illustrated: RS-422/485 Copper to Fiber converter

The page that follows provides ordering information for Canary's Serial RS-422/485 Copper to Fiber Converter products:

- **Serial to Standard Multi-mode fiber**
CSC-4D9MX
- **Serial to Standard Single-mode fiber**
CSC-4D9SX



Canary Communications is an
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Canary Communications, Inc.
18655 Madrone Pkwy, #100
Morgan Hill, CA 95037

Tel: (408)465-2277
Fax: (408)465-2278
Web: www.canarycom.com

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Serial RS-422/485 Copper to Fiber Converters

CSC-4D9MX – Serial to Standard Multi-mode fiber

CSC-4D9SX – Serial to Standard Single-mode fiber

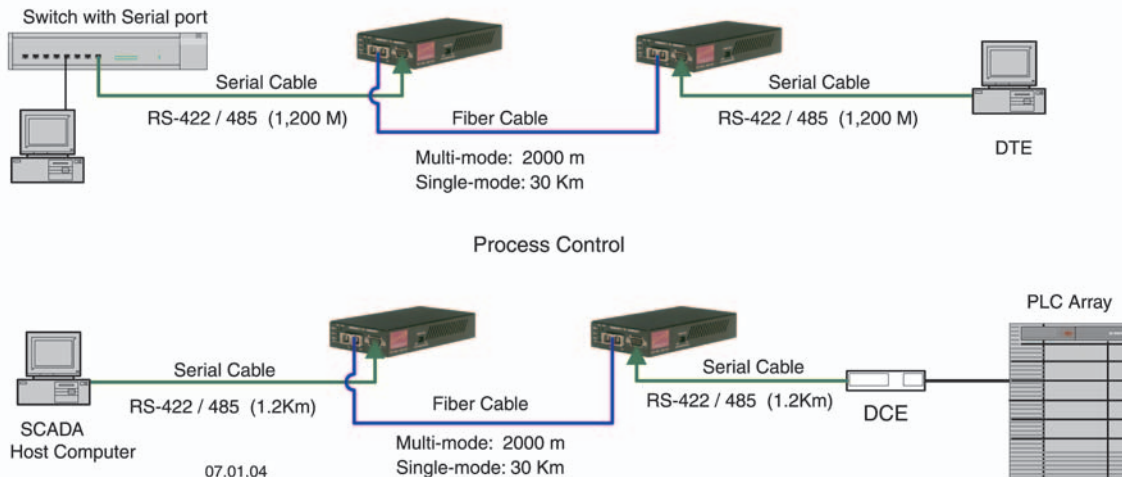
- Complies with EIA/TIA-422, EIA/TIA-485 specifications
- Supports asynchronous data transfer rates of up to 120 Kbps
- LED status indicators (power, link and receive)
- Easy "plug-and-go" installation
- Supports 4-wire full and half duplex modes
- Internal DIP switch enabled termination
- DTE, DCE selection push-button
- FCC Class A and CE approved
- Available ST/SC connectors
- External power supply

Ordering Information

Model Numbers	Media Types	Optical Specifications								
		Min. Tx PWR	Max. Tx PWR	Rx Sensitivity	Min. PWR Budget	Max.PWR Budget	Max. Input PWR	Connector Type	Wavelengths (nm)	Transmit Distance
CSC-4D9-M1	RS / MM *	-20.0 dBm	-14.0 dBm	-31.0 dBm	11.0 dB	17.0 dB	N/A	DB-9 / SC	1310 nm	2000 m
CSC-4D9-M2	RS / MM	-20.0 dBm	-14.0 dBm	-31.0 dBm	11.0 dB	17.0 dB	N/A	DB-9 / ST	1310 nm	2000 m
<i>Specifications above in blue are for multi-mode, fiber connectors. Specifications below for single-mode, fiber connectors.</i>										
CSC-4D9-S1	RS / SM	-15.0 dBm	-8.0 dBm	-34.0 dBm	19.0 dB	26.0 dB	-7.0 dBm	DB-9 / SC	1310 nm	30 Km
CSC-4D9-S2	RS / SM	-15.0 dBm	-8.0 dBm	-34.0 dBm	19.0 dB	26.0 dB	-7.0 dBm	DB-9 / ST	1310 nm	30 Km

* Serial RS-422 / 485 interfaces (copper cable)

CSC-2D9MX & CSC-2D9SX Serial-to-Ethernet Fiber Converters



The diagram illustrates typical applications for the CSC-4D9M1 series. The actual distances will depend on several factors including the quality of cables used and the terminal equipment employed.

