

Model 4043A 6-Channels Fiber Transmitter, Unidirectional Interface Converter

- **Copper Serial Input channels: 3-Channels RS422 Differential / 3-Channels RS232**

INTRODUCTION:

The Model 4043A is a high speed 6-Channel ST Fiber to Copper Serial Uni-directional Interface Converter. Typical operating speeds are able up to 10 Mbps for RS422; 115.2 Kbps for RS232.

APPLICATIONS:

The converter provides an industrial solution for applications requiring a single point-to-point or a communication link over short and long distances. Application include: PC-to-PC long distance communications, factory automation, data collection devices, barcode readers, time clocks, scales, data entry terminals, ATM's and serial communications in harsh environments.

The Model 4043A is designed to operate from -40°C to +85°C. The unit features ESD protection circuitry on the copper interfaces. The power input is protected from transients, as well as, over voltage and over current. The converter

is designed to operate from 9.9 VDC to 35 VDC, via the 9-pin microD connector.



FEATURES:

- Model 4043A converts ST Duplex Fiber to Copper; 2-Channels; two channels (CH1, CH2) RS422 over a single 9-pin microD port (J2); 4-channels (J7, J8, J9) & 1-channel (J10) RS422 over a single 15-pin microD port (J3).
- Supports constructing an optically isolated high speed communication link between connected devices.
- Typical operating speeds are up to 10 Mbps for RS422 to fiber conversion, and 115.2 Kbps for RS232.

SPECIFICATIONS:

Optical Interface:

TX Power: 12 dBm
RX Sensitivity: -27.5 dBm
Wavelength: 850 nm, multimode
Fiber Size: Accepts 50/125 μm , 62.5/125 μm ,
or 100/140 μm

Fiber Polarity:

Logical 0 = Light ON/OFF: User Selectable via Jumper
Logical 1 = Light ON/OFF: User Selectable via Jumper

Copper Interface:

3 Channels RS422
3 Channels RS232
Bit Rate (nom.):
RS422: up to 10 Mbps
RS232: up to 115.2 Kbps

Operating Environment:

40°C to +85°C

Model 4043A / Cat. No. 304043A

Copper Connectors:

- Copper I/O: RS422, 9-CNT J2 MicroD, Pin Connector: (M83513/03-A09N)
- Copper I/O: RS232/RS422, 15 CNT J3 MicroD, Pin Connector: (M83513/03-B09N)

Glass Fiber Connectors:

- (3) ST Fiber Optic connectors for Ports (J7, J8 and J9) supporting RS232 over fiber for speeds up to 115.2 Kbps
- (3) ST Fiber Optic connectors for Ports (J4, J6 and J10) supporting RS422 over fiber for high speeds up to 10 Mbp

Power Connector:

- Supply Voltage: (9.9 - 35) VDC
- 9-Socket- J1; M83513/04-A09N

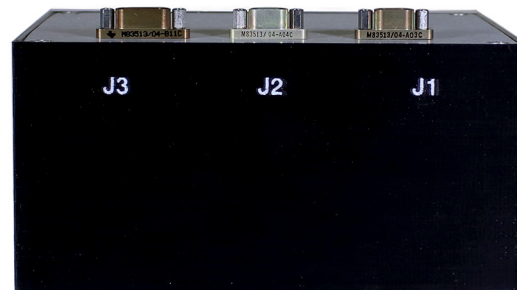
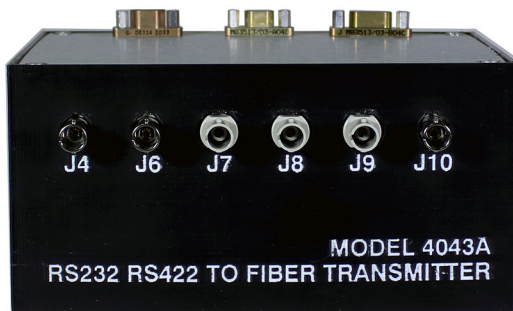
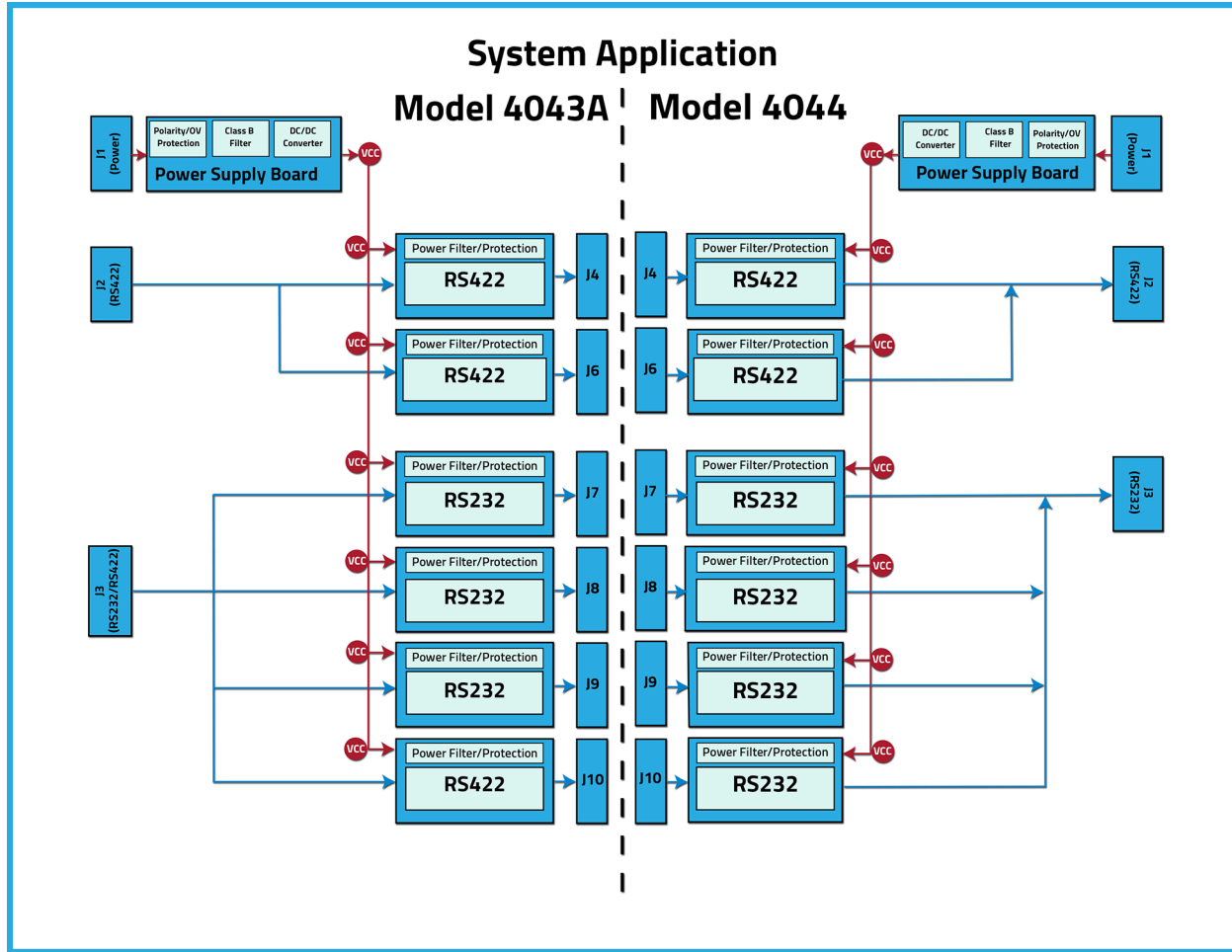
Mechanical:

Size: 5" x 4.71" x 2.83" [127mm x 119.6mm x 71.9mm]
Weight: 0.917 Lbs. [0.416kg]

Ground Relationship / Configuration:

- **RS232:** Signal GND tied to digital GND, both isolated from Chassis GND.
- **RS422 Channels:** 1000 Ohm impedance between Signal GND and and Digital GND, both isolated from Chassis GND

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**Model 4043A RS232 RS422 to Fiber Transmitter
 Front Panel and Rear Panel View.**