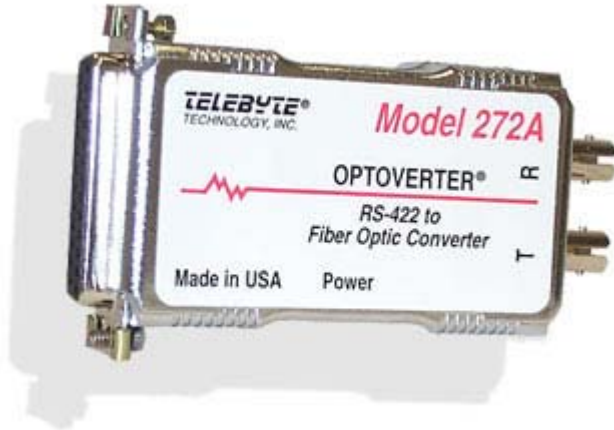




"Your world-wide source for fiber and copper connectivity"



Model 272A Optoverter

Reference Manual

0315-0305 Rev. C

Printed 03.08.02

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1.0 General Description

The Model 272A Optoverter, 4 wire RS-422 to Fiber Optic Line Driver/Converter, provides the capability of extending the distance of an RS-422 network to 6600 feet. At the same time it provides the inherent advantages of fiber transmission over optic cable, immunity to interference, safety, secure communications, etc.

2.0 Specifications

Electrical: Full duplex RS-422, 4 wire

Fiber Interface: Optimized for 62.5/125 micron fiber cable

Wavelength: 850 nm

Speed: 0-2.5 MHz

Power Budget: with 62.5/125 micron fiber 12 dB

Distance: Fiber 2 km (distances could exceed 2 km depending on fiber loss.)

RS-422: per RS-422 specification

Connectors: Fiber = ST, RS-422 = DB-25 Female

Power: 115 VAC/60 Hz (220 VAC/50 Hz optional)

Size: 3.5" L x 2" W x .875" H

Environment: 0 to 50C, 5 to 95% RH (no condensation)

3.0 Installation

3.1 RS-422

The RS-422 connector to the Model 272A allows for full duplex operation through a DB-25 female connector. Refer to the following chart for pin assignments.

DB-25F	Data Direction
2	Data In -
14	Data In +
3	Data Out -
16	Data Out +
* 9	+12 V In
**7	Signal Ground
**1	Frame Ground

*See Power 6.0 Section, **Pins 1 & 7 are jumpered together

3.2 Fiber

The fiber optic end has been optimized for operation with 62.5/125-micron cable and comes equipped with ST type fiber optic connectors.

4.0 Operation

The Model 272A can be connected to any RS-422 device running at speeds up to 2.5 MHz. To connect the units, the connections 'Data In' are connected to the 2 wire data from the RS-422 equipment and the 'Data Out' provides a signal to the receive data pins of the RS-422 equipment. To connect the 272A to another 272A the fiber connector marked T should be connected to the far end fiber connector marked R, and the local R to the far end T.

5.0 Troubleshooting

To verify proper operation of a unit, a short piece of fiber optic cable, with ST connectors, can be used to connect the transmit output to the receiver input. Using an RS-422 piece of equipment that can operate in full duplex mode, send data into the converter and observe that the correct data is being received correctly.

6.0 Power

The Model 272A is powered by a small DC power adapter that supplies reduced DC voltage. In addition, power can be applied to the Model 272A by using pin 9 on the DB25 female connector and pin 7 as the ground connection. When using this pin, the input voltage should be +12VDC.

7.0 Help

If any assistance is required call Telebyte Customer Service at 800-835-3298, fax (631)385-8184 or email support@telebyteusa.com

Warranty

TELEBYTE warrants the equipment to be free from defects in material and workmanship, under normal and proper use and in its unmodified condition, for 12 months, starting on the date it is delivered for use. TELEBYTE's sole obligation under this warranty shall be to furnish parts and labor for the repair or replacement of products found by TELEBYTE to be defective in material or workmanship during the warranty period. Warranty repairs will be performed at the point of manufacture. Equipment approved for return for warranty service shall be returned F.O.B. TELEBYTE factory and will be redelivered by TELEBYTE freight repaid, except for non-continental U.S.A. locations. Non-continental deliveries will be sent COD freight plus import/export charges.

The above warranty is in lieu of all other warranties, expressed or implied, statutory or otherwise, including any implied warranty of merchantability or fitness for a particular purpose. TELEBYTE shall not be liable for any damages sustained by reseller or any other party arising from or relating to any equipment failure, including, but not limited to consequential damages nor shall TELEBYTE have any liability for delays in replacement or repair of equipment.

Out of warranty equipment may be returned to the Greenlawn, NY customer service facility prepaid as described above. Return shipping charges will be billed to the customer. The repaired unit will have a 90-day warranty. In those cases where "NO TROUBLE" is found, a reduced charge will be billed to cover handling, testing and packaging.

Whether in or out of warranty, a Return Material Authorization (RMA) number is necessary and can be obtained by calling (631) 423-3232 or 1-(800) 835-3298, by faxing (631) 385-8184/7060 or by e-mailing us at support@telebyteusa.com. You can also visit us on the web at www.telebyteusa.com/rma.htm. Reference the RMA number on the outside container.

Document No. 0315-0305/Rev. C

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