

NetShield Product Manual.

Netshield RS232/422/485 to Fiber - Media Converter

Product Description

The Netshield RS232/RS422/485 Copper to Fiber Media Converter allows you to extend one of these serial ports over multi or single mode fiber for a distances of up to 3,5Km.

Features

- Asynchronous serial transmission.
- Auto lock on data rate.
- 2-wire or 4-wire operation in RS-485 mode.
- Half or full-duplex modes.
- Data rates up to 2Mbits/second.
- Point-to-Point or Multi-Drop Connections.
- Fiber optic's protects form outdoor environmental stresses like electromagnetic/radio frequency interference, electrostatic discharges and electrical surges.

Link a Remote Terminal to Host Computer

Connect devices, such as security mag-card scanners, PABX's and remote terminals, to a host over distances of up to 3,5Km.

Link Multiple Devices

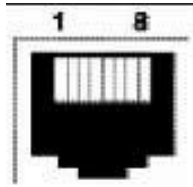
Connect multiple devices on the electrical interface in a ring configuration. Connect multiple devices on the fiber optic interface in a ring configuration.

Connector pin outs

RS232

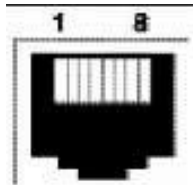
Customer Unit	DCD	DCD	NetShield Unit
	DSR	DSR	
	RXD	RXD	
	RTS	RTS	
	TXD	TXD	
	CTS	CTS	
	DTR	DTR	
	GND	GND	

RS232



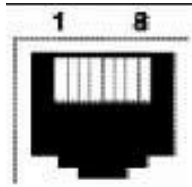
Pin	Description
1	DCD
2	DSR
3	RXD
4	RTS
5	TXD
6	CTS
7	DTR
8	GND

RS422



Pin	Description (4 wire)	Direction for RS422 for the NetShield Unit
1	B (Transmit B)	In
2	A (Transmit A)	In
3	NC	
4	(Receive B)	Out
5	(Receive A)	Out
6	NC	
7	GND	
8	GND	

RS485



Pin	Description (4 wire)	Direction for RS485 for the NetShield Unit
1	B	In / Out
2	A	In/ Out
3	NC	
4	NC	
5	NC	
6	NC	
7	GND	
8	GND	

Dipswitch settings

Dip-switch SW1 (8 Way Dip-switch)	
Switches 1&2 select 2 or 4 wire operation. Only one must be selected at any point in time. Has no influence during RS232 mode.	
1	Assert - RS485 2 wire Mode
2	Assert - RS485/RS422 4 wire Mode
Switches 3 through to 5 setup the TX 4-wire interface. These are only used during RS485/RS422 4-wire operation.	
3	Assert - RS485/RS422 TX(+) Bias to Positive
4	Assert - 120 Ohm RS485 TX Termination
5	Assert - RS485/RS422 TX(-) Bias to Ground
Switches 6 through to 8 setup the RX 2 and 4-wire interface. These are used during RS485/RS422 2 and 4-wire operation.	
6	Assert - RS485/RS422 RX(+) Bias to Positive
7	Assert - 120 Ohm RS485 RX Termination
8	Assert - RS485/RS422 RX(-) Bias to Ground

Dip-switch SW2 (4 Way Dip-switch)	
1	Asserted – enables RS232 and disables RS485/RS422 modes.
2	Asserted – enables RS232 active when RTS active
3	Not Used
4	Not Used

Note: Bias setting force the A and B legs of the RS485 Interface to predetermined potentials.

Standards: TIA/EIA-574
Connectors: Terminal Block, ST fiber optic 850nm, DB-9 Female.
Straps: 2 or 4-wire selection, RS-232 or RS-485 selection.
Data Rate: 1200 to 2 Mbps.
LEDs: Power, Rate select, Link, Activity.
Dimensions: L - 142 x H - 52 x B - 91 mm
Power: Internal - 200 to 250VAC (24VDC optional).
Environment: 0 - 50° C; 5% - 90% humidity, non-condensing.
Shipping Weight: 1 kg
Warranty: Lifetime carry in warrantee.

Multimode: Connector Type: ST

Wavelength: 850nm LED

Typical Distance: 3.5Km

TX PWR: -12dBm

RX Sensitivity: -38dBm