

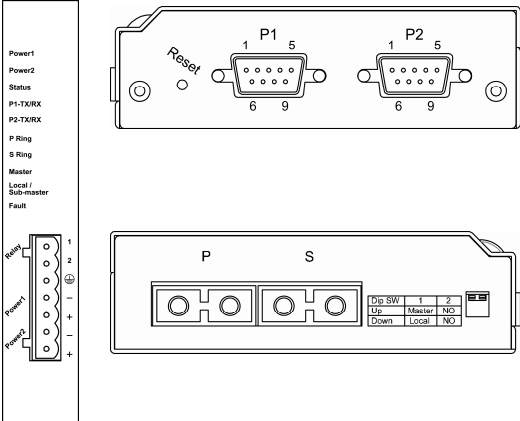
Industrial 2-port RS-232/422/485 Self-Healing Ring Fiber Modem

This quick start guide describes how to install and use the Industrial Serial Self-Healing Ring Fiber Modem. Capable of operating at temperature extremes of -10°C to +60°C.

There are Terminal Block power inputs can be used to power up this device. Redundant power supplies function is supported.

Physical Description

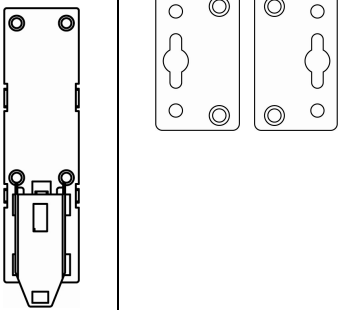
The Port Status LEDs and Power Inputs



Power Input Assignment			
Power1	+	12-32VDC	Terminal Block
	-	Power Ground	
Power2	+	12-32VDC	
	-	Power Ground	
⏏		Earth Ground	

Relay Alarm Assignment	
Relay	*Warning signal disable for following: The relay contact closes if Power1 and/or Power2 are failed.

DIN-Rail Kits & optional Panel Mounting Kits



DIP Switch Settings

DIP switch for Master and Sub-master/Local mode settings.

DIP switch	1	2
Up	Master	Function reserved
Down	Sub-master/Local (Default)	Function reserved

There should be only one master in a ring, and only master supports console configuration.

LED	State	Indication
System		
Power 1	Steady	Power on
Power 2 (Green)	Off	Power off
Status (Green)	Steady	Functioned
	Flashing	Reset
Fault (Orange)	Steady	Power or port link fails
	Off	Well Functioned
Machine mode		
Master (Green)	Steady	Master Mode
	Off	Off status
Sub-master/Local (Green)	Steady	Local Mode
	Flashing	Sub-master mode
	Off	Off status

Serial port		
Port 1 (TX/RX)	Flashing	Data transmitting
Port 2 (TX/RX)		
Ethernet port: 100Base-FX		
P Ring (Primary Ring) (Green)	Steady	A valid connection through Primary path
	Flashing	Ethernet port data transmitting
	Off	No valid connection established
S Ring (Secondary Ring) (Green)	Steady	A valid connection through Secondary path
	Flashing	Ethernet port data transmitting
	Off	No valid connection established

Pin Assignments of Serial Port (DB-9)

Pin	1	2	3	4	5	6	7	8	9
RS-232	DCD	RxD	TxD	DTR	Signal GND	DSR	RTS	CTS	RI
RS-422, 4-wire RS-485	TxD+	RxD-	RxD+		Signal GND		TxD-		
2-wire RS-485		D-	D+		Signal GND				

Functional Description

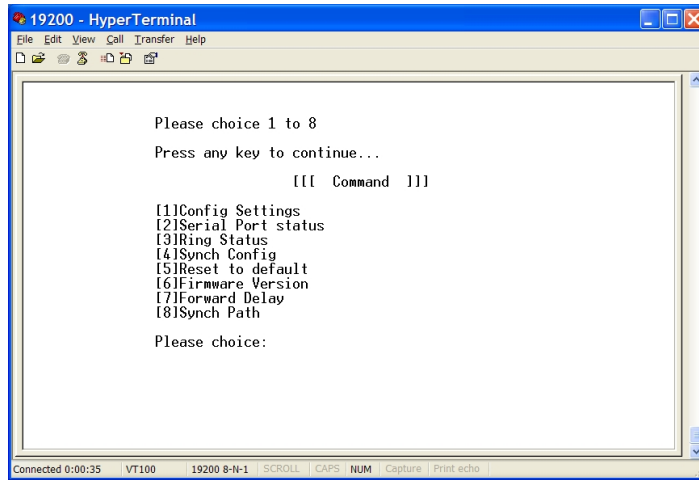
- Flexible Serial Ports: Supports 2 ports of RS-232/422/485.
- Dual LAN Ports: Supports network connection Self-Healing Ring function.
- Fiber Option: Supports single-mode and multi-mode fiber optics for both LAN ports.
- Redundant Power Input: Two Terminal Block power inputs ensure the continuous electrical stability.
- DNP3.0 transparency: Allows DNP protocol passed through.
- Flexible Installation Method: Aluminum housing with panel and DIN-Rail mounting.
- Warning: Inform user by relay output in case of power failure.
- Simple Configuration: Supports DIP switch for Master/Local settings.

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Console Configuration

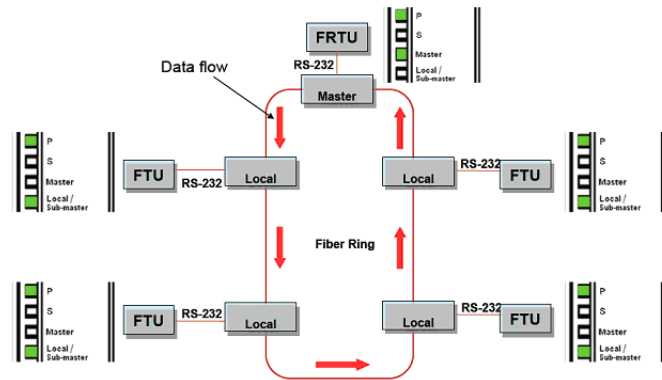
- Connect to the console port:
Connect the DB9 straight cable to the RS-232 serial port of the device and the RS-232 serial port of the terminal or computer running the terminal emulation application. Direct access to the administration console is achieved by directly connecting a terminal or a PC equipped with a terminal-emulation program (such as HyperTerminal) to the console port.
- Configuration settings of the terminal-emulation program:

Baud rate	Data bits	Parity	Stop bit	Flow control
19,200bps	8	none	1	none

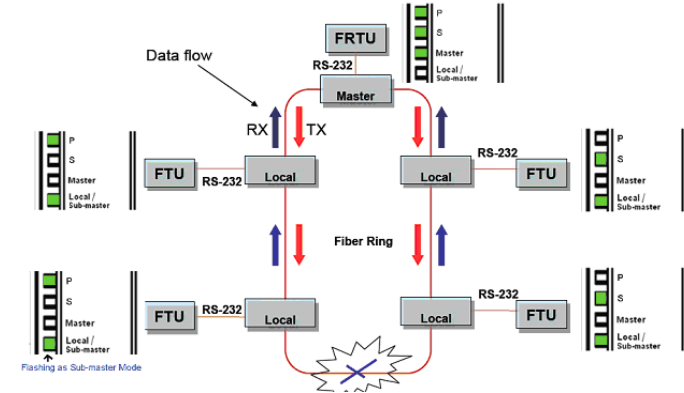


Self-Healing Ring

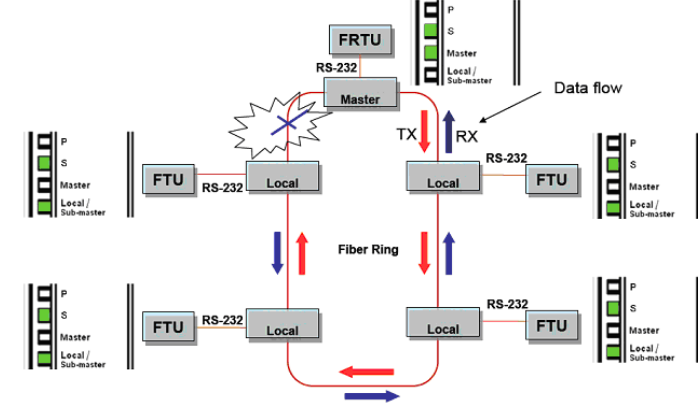
Self-Healing Ring Normal Status – Primary Ring



LED status– when Link Failure, scenario 1



LED status– when Link Failure, scenario 2



LED status – when Link Failure, scenario 3

