IED-2020

2-Port RS-232/422/485 Industrial Serial Device Server

1-TX, 1-FX SC SM 20KM

Quick Installation Guide

v1.00 - 1210

Overview

The IED-2020 is an Industrial Ethernet to serial converter, also called the Ethernet Terminal Server or the Serial Device Server for industrial use in harsh environments. The serial interface is selectable between RS-232 / RS-422 / RS-485 and the Ethernet interface supports TCP, UDP, ICMP, IGMP, HTTP, ARP networking protocols. This device is designed for easy installation; setting up is a breeze with included Windows based driver software that gives the local COM port, retaining existing software applications to be connected just as if they were attached locally. It can also be set up remotely over the local network or internet using Telnet, SNMP or web browser.

Management

Supports a variety of management features including: CLI via Telnet; Graphic User Interface via Web Browser or Simple Network Management Protocol via SNMP tools. It provides better visibility and management of those critical assets. Also, the Windows based driver software provides the local COM port, allowing the application to control the serial device across the local network as it is attached locally.

Safety

The Serial Device Server is FCC and CE approved with 15KV ESD surge protection, and meets RoHS hazardous materials standards. The Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment 2002/95/EC which commonly referred to as the Restriction of Hazardous Substances Directive or RoHS

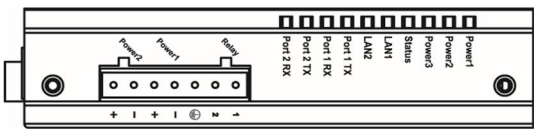
Features

- Supports 2-port RS-232/422/485 serial communication
- Supports 1-port 10/100Mbps Ethernet & 1-port 100FX SC SM 20KM Fibre
- 15KV ESD surge protection
- 64KB port memory buffer prevents data loss when connection failed
- Virtual COM, TCP Server, TCP Client, UDP and Pair Connection
- Web, Telnet, SNMP and Windows based utility management
- Terminal Block and latch secure DC Jack power inputs
- DIN-rail mounting with aluminium housing
- -10 to 60 Celsius operating temperature

Package Contents

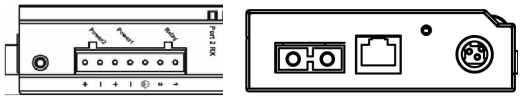
- IED-2020
- Quick Installation Guide
- CD User Manual / Utility

LED Status



LED	Status	Description
Power1, 2, 3	Steady	Power On
	Off	Power Off
Status (Orange)	Steady	Device Server is not utilised by Xport utility
	Flashing	Device Server is utilised by Xport utility
Ethernet Port: 10/100Base-TX, 100Base-FX		
LAN1, LAN2 (Yellow)	Steady	Network connection is established
	Flashing	Transmitting or Receiving data
	Off	No connection occurred
Serial Port		
Port1 / Port2 TX (Yellow)	Flashing	Transmitting data
Port1 / Port2 RX (Yellow)	Flashing	Receiving data

Power Input

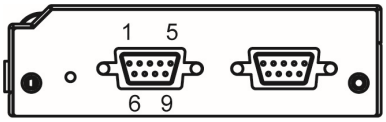


Power1, 2 (Terminal Block)	12 – 32VDC (+), Power Ground (-)
Power2 (DC Jack)	12VDC
⏚	**Earth Ground**
Relay	*Warning signal disable for following: 1. The relay contact closes if Power1 and Power2 are both failed but Power3 on. 2. The relay contact closes if Power3 is failed but Power1 and Power2 are both on.

Note

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

Serial Port Pin Assignment



PIN	RS-232	RS-422 (4-wire RS-485)	RS-485 (2-wire)
1	DCD	TxD +	
2	RxD	RxD -	D -
3	TxD	RxD +	D +
4	DTR		
5	Signal GND	Signal GND	Signal GND
6	DSR		
7	RTS	TxD -	
8	CTS		
9	RJ		

Default Setting

The default settings of Serial Device Server are shown in the following:

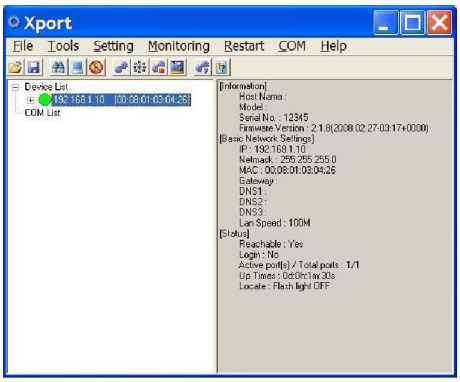
Ethernet Port	
IP Address	192.168.1.10
Port	601 (1st Port)
Gateway	
Subnet Mask	255.255.255.0
Security	
Password	admin
Serial	
COM	9600/None/8/1, No flow control
Link Mode	TCP Server, TCP port 601

Reset button:

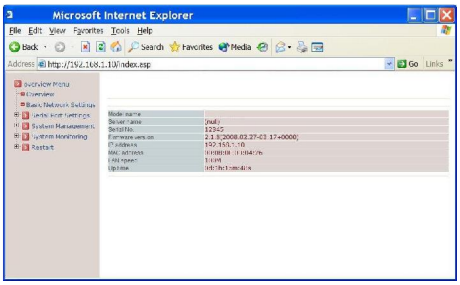
- **Reboot Device**: Press Reset button for 0~10 secs, Status LED flashes every 500 ms
- **Default Password**: Press Reset button for 11~30 secs, Status LED flashes every 200 ms
- **Factory Default**: Press Reset button for over 30 secs, Status LED flashes every 1 sec.

Configuration

Xport utility allows user to configure the device IP or map a serial port to a COM port on the PC, etc.



User can also configure the device via web browser



Please refer to User Manual for more details