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Data Sheet

iDS3-S

Industrial Single Port RS232/422/485 to Dual Port LAN Ethernet Serial Device Server

Product Overview

The iDS3-S is an industrial device server with a single serial port RS-232/422/485 and 2 redundant Ethernet local area network (LAN) ports for converting signals between serial and Ethernet networks. It comes with standard features such as a TCP/IP interface with versatile operating modes: Virtual Com, TCP Server, TCP Client, UDP, Modbus RTU / ASCII Master, and Modbus RTU / ASCII Slave. Using the Windows utility iDS Manager, the iDS3-S can easily be used to configure multiple devices and set up the mappings of Virtual Com. Administrators will also find it convenient to configure the iDS3 using either the Network Address Translation (NAT)- pass through functionality, IP domains, or remotely via the Internet. The iDS3-S can simultaneously transfer data to up to 5 redundant host PC's to avoid an Ethernet connection breakdown or failure of any host PC. To ensure secure transmission of critical data, the iDS3-S features HTTPS and SSH.

The IDS3-S operates at wide operating temperature of -40°C to +85°C and has IP-40 enclosure. All these robust features make the iDS3 an ideal product for harsh industrial environment and critical data communications.

Tel: +1 905-670-0004
Toll Free : +1 844-520-0588
Technical Support: +1 844-475-8324
Email: info@is5com.com
www. is5com.com

Features

Table 1. Features

Feature	
Supports:	• **NAT-pass through: User can manage IDS3 through NAT router** • **Dual redundant Ethernet ports** • **Redundant multiple host devices: 5 simultaneous in Virtual COM, TCP Server & Client** • **4 IP Ranges: UDP** • **Secure Management by HTTPS and SSH** • **IP Access: IP White List**
Operating modes: • **Virtual COM** • **TCP Server** • **TCP Client** • **UDP** • **Modbus RTU Slave** • **Modbus RTU Master** • **Modbus ASCII Slave** • **Modbus ASCII Master**	
IP-40 Galvanized Steel Housing	
Multiple alarm notifications methods	
Configurable by centralized management (iDS Manager), Web UI, and SSH	
Supports Windows NT / 2000 / XP / 2003 /VISTA/Windows 7(32/64bit)/Windows 10 (32/64bit) OS	
DIN rail and panel mount	

Product Specifications

Table 2. Technical Specification

Description	Specification
Ethernet Ports 1 &2	
10/100 Base-T(X) RJ45 Auto MDI/MDIX	2
Serial Port 1	
Connector	DB9 x 1
Operation Mode	RS-232/422/4(2) Wire RS-485
Serial Baud Rate	1200 bps to 460.8 Kbps
Data Bits	7, 8
Stop Bits	1, 2 (1.5)
Parity	None, Odd, Even, Mark, Space
Flow Control	None, XON/XOFF, RTS/CTS, DTR/DSR
RS-232	TxD, DTR, GND, DSR, RTS, CTS
RS-422	Tx-, Tx+, Rx+, Rx-
RS-485	4 wire: Tx-, Tx+, Rx+, Rx-; 2 wire: Data-, Data+
Network Protocol	
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP
LED Indicators	
Power indicator	2 x LEDs, PWR 1(2) / Ready; Green On: Power is ON
10/100 TX RJ45 port indicator	Green for Port Link/Act at 100Mbps
Serial TX / RX LEDs	Amber: Serial port is receiving data; Green: Serial port is transmitting data
Power	
Input Power	Input 12-48VDC
Power Consumption (Typ.)	2 W
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristics	
Enclosure	IP-40 Galvanized Steel
Dimensions (W x D x H)	26 (W) x 81 (D) x 122 (H) mm (1.0 x 3.2 x 4.8 inches) DIN rail mount 27 (W) x 87 (D) x 140 (H) mm (1.1 x 3.4 x 5.5 inches) Panel mount
Unit Weight (g)	~300 g

Table 3. Compliance Specifications

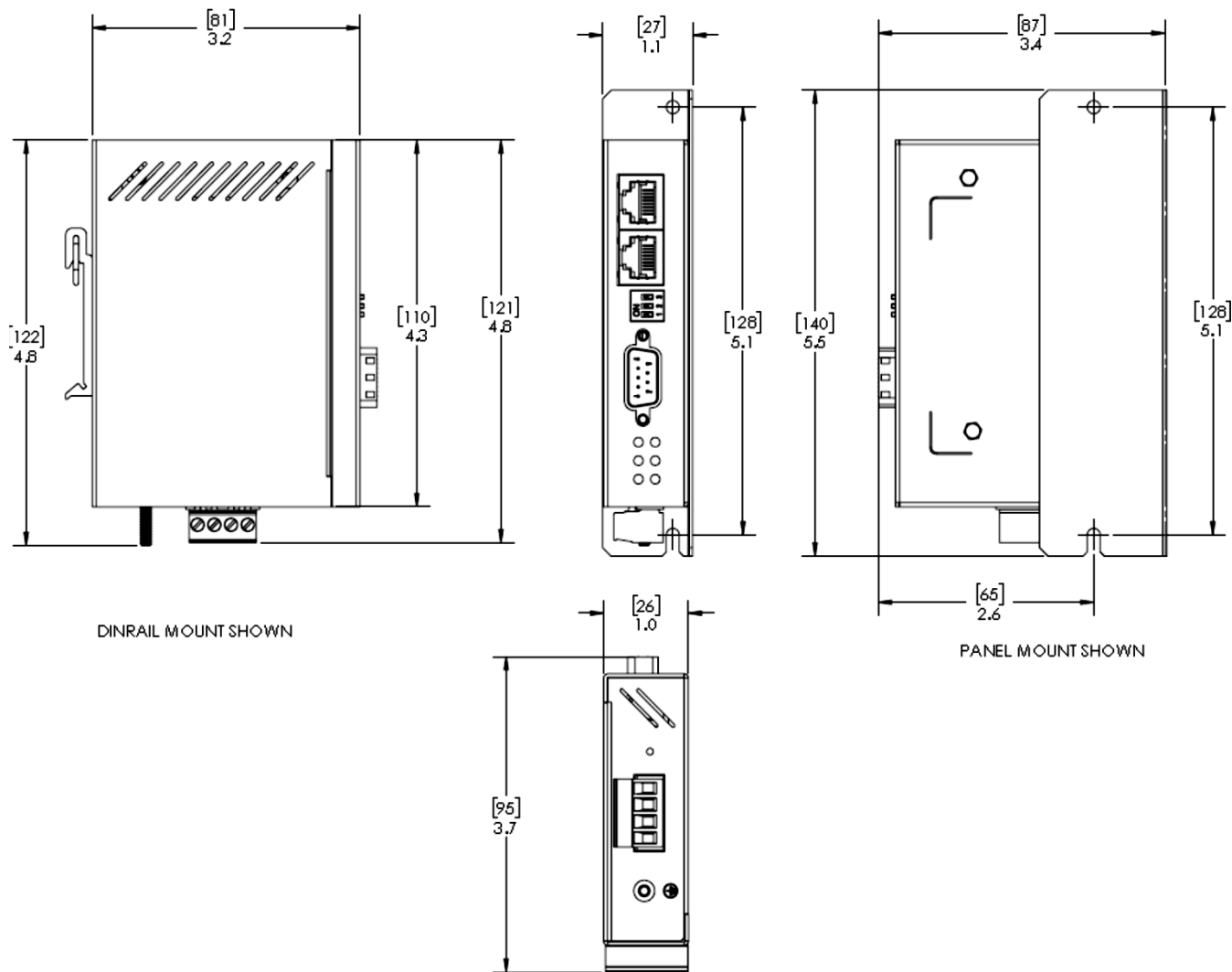| Type	Standards
Electromagnetic Emissions	FCC Part 15, Class A, CISPR Class A (EN55022)
Electromagnetic Immunity	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Safety Standards	EN60950-1
Operating Environment	-40°C to +85°C (-40° to 185°F) (no fans) EN 60068-2-21
Storage Environment	-40°C to +85°C (-40° to 185°F) EN 60068-2-14
Operating Humidity	5% to 95% Non-condensing EN 60068-2-30
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-32
Warranty	5 years

Table 4. Standards and Management

Description	Specification		
IEEE Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control		
RFC Compliance	• RFC 768: UDP • RFC 791: IPv4 • RFC 792: ICMP • RFC 793: TCP	• RFC 1157: SNMPv1 • RFC 1166: IP Addresses • RFC 1901,1902-1907 SNMPv2 • RFC 2131, 2132: DHCP	• RFC 2571: SNMP Management • RFC 4250-4253 SSH • RFC 5246 TLS Protocol (HTTPS) • RFC 5321 SMTP

Dimensions

All dimensions are shown in inches.

DINRAIL MOUNT SHOWN

PANEL MOUNT SHOWN

Ordering Information

Base	Power Supply	Mount	Ethernet Port 1&2	Serial Port 1	Conformal Coating	Description
iDS3-S	LV	D	2RJ45	1DB09	C1	
iDS3-S	|	|	|	|	|	Slim Line core assembly and packaging
	LV	|	|	|	|	Input 12-48VDC
		D	|	|	|	DIN Rail Mounting
		P	|	|	|	Panel Mounting
		N	|	|	|	No Mounting Hardware
			2RJ45	|	|	2 X 10/100 Base T(X) RJ45
				1DB09		1 X RS232/422/485 DB9
					C1	Conformal Coating

Example Order Code **iDS3-S-LV-D-2RJ45-1DB09-C1**

Description: **1 Port RS232/422/485 to Ethernet Device Server, (Power Supply) Input 12-48VDC, DIN Rail Mounting, 2 x 10/100Base T(X) RJ45, 1 x RS232/422/485 DB09 Serial Port, C1- added for Conformal Coating**