iS5 COMMUNICATIONS

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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-S 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-S an ideal product for harsh industrial environment and critical data communications.

Features and Benefits

Table 1. Features

FEATURE	
SUPPORTS	• NAT-pass through: User can manage iDS3-S 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, SM
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

Specifications are subject to change without notice.   Questions? Call: +1.844.520.0588

Features and Benefits

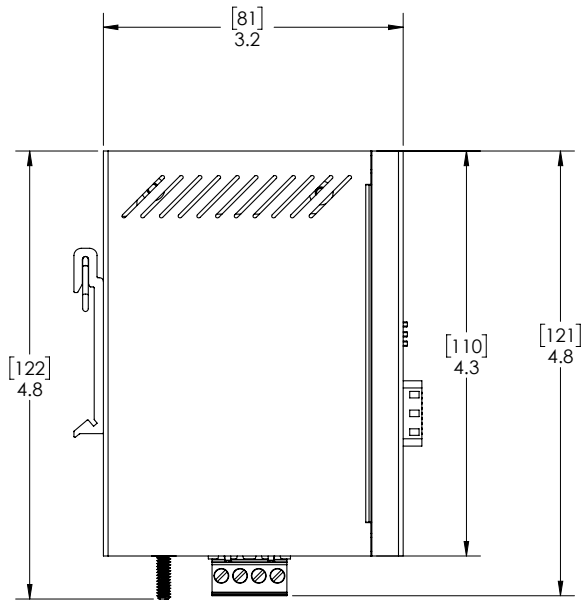| POWER	
INPUT POWER	Input 12-48VDC (Opr)
POWER CONSUMPTION (TYP.)	2 W
OVERLOAD CURRENT PROTECTION	Present
REVERSE POLARITY PROTECTION	Present
PHYSICAL CHARACTERISTICS	
ENCLOSURE	IP-40 Galvanized Steel
DIMENSIONS (W X D X H)	26 (W) x 81 (D) x 122 (H) mm (1.0 x 3.2 x 4.8 inches) DIN rail mount 27 (W) 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 Specification

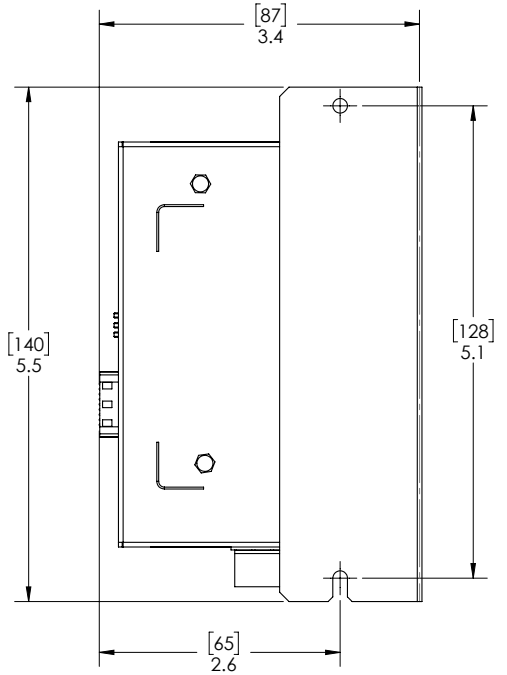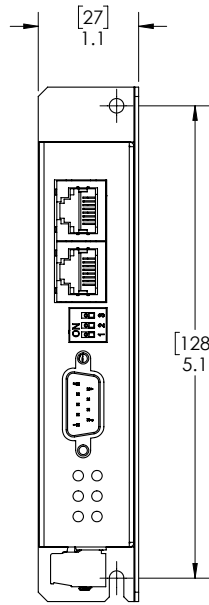| TYPE	STANDARDS
ELECTROMAGNETIC EMISSIONS	FCC Part 15, Class A, CISPR Class A (EN55022)
ELECTROMAGNETIC IMMUNITY	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
SAFETY STANDARDS	EN60950-1
OPERATING ENVIRONMENT	-40°C to +85°C (-40° 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, (extendable option with additional terms)

Table 4. Standards and Management

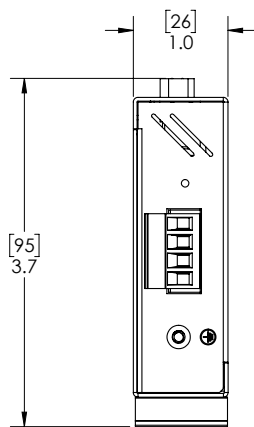| DESCRIPTION	SPECIFICATION		
IEEE STANDARDS	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control		
RFC COMPLIANCE	• RFC 768: UDP • RFC 791: IPv4 • RFC 792: ICMP • RFC 793: TCP	• RFC 1157: SNMPv1 • RFC 1166: IP Addresses • RFC 1901,1902-1907 SNMPv2 • RFC 2131, 2132: DHCP	•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

Dimensions

All dimensions are shown in inches [millimeters].

DINRAIL MOUNT SHOWN

[81] 3.2

[122] 4.8

[110] 4.3

[121] 4.8

[27] 1.1

[128] 5.1

[26] 1.0

[95] 3.7

PANEL MOUNT SHOWN

[87] 3.4

[140] 5.5

[128] 5.1

[65] 2.6

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Ordering Information

BASE	POWER SUPPLY	MOUNT	ETHERNET PORT 1&2	SERIAL PORT 1	MOD	DESCRIPTION
iDS3-S	LV	D	2RJ45	1DB09		
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

iDS3-S Sample Order Code

iDS3-S-LV-D-2RJ45-1DB09

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.

The same unit, may be ordered with conformal coating by appending '-C1' to the order code, for example: 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. This system will be conformal coated.

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