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iDS6

Industrial 4 Port RS232/422/485 to 2 Port Ethernet Serial Device Server

Product Overview

iDS6 is an industrial device server with 4 serial ports RS-232/422/485 and 2 redundant Ethernet local area network (LAN) ports for converting signals between serial and Ethernet networks. The redundancy feature provides protection against failure of an Ethernet LAN port, by automatically switching to another LAN port within 10ms to guarantee delivery via an alternative path. iDS6 also supports an Ethernet switch mode (RS 485) allowing users to daisy chain several serial servers reducing the usage of Ethernet switch ports.

Another redundancy feature in the iDS6 is the simultaneous transfer of data of up to 5 host PCs. This feature ensures that critical data is sent via alternative Ethernet paths and to multiple host PC's ensuring data is not compromised by the Ethernet connections or potential host PC failure.
With Network Address Translation (NAT) pass through functionality, users are able to manage the iDS6 inside or outside the NAT router, making it easy for different IP domain users to use the device server. The iDS Manager software can be used to configure the serial device server.

Features and Benefits

Table 1. Features

FEATURE	
SUPPORTS	• NAT-pass through: User can manage iDS6 through NAT router • Dual redundant Ethernet ports • Redundant multiple host devices: 5 simultaneous in Virtual COM • 4 IP Ranges: UDP • Secure Management by HTTPS and SSH • IP security table for preventing unauthorized access
OPERATING MODES	• Virtual COM • TCP Server • TCP Client • UDP
DUAL INPUT POWER SUPPLIES	
IP-40 GALVANIZED STEEL HOUSING	
MULTIPLE ALARM NOTIFICATIONS METHODS (SYSLOG, SMTP MAIL & SMTP TRAP, FAULT EVENT NOTIFICATION AND FAULT LED / RELAY)	
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
PORTS	
10/100 BASE-T(X) RJ45 AUTO MDI/MDIX	2
RS232/422/485 DB9	4
SERIAL PORT 1	
CONNECTOR	DB9
OPERATION MODE	RS232/422/ 4(2)-Wire RS-485, which can be configured using the iDS Manager or secure Web UI
SERIAL BAUD RATE	110 bps to 460.8 Kbps
DATA BITS	5, 6, 7, 8
STOP BITS	1, 2 (1.5)
PARITY	None, Odd, Even, Mark, Space
FLOW CONTROL	XON/XOFF, RTS/CTS, DTR/DSR
RS-232	DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS, RI
RS-422	RxD-, RxD+, TxD+, TxD, GND
RS-485 (4 WIRE)	4 wire: RxD-, RxD+, TxD+, TxD, GND
RS-485 (2 WIRE)	2 wire: Data+, Data-, GND
NETWORK PROTOCOL	
PROTOCOL	ICMP, IP, TCP, UDP, DHCP/ BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP, DDNS, PPPoE

Features and Benefits

POWER	
INPUT POWER	Dual Input 10-48VDC; Single Input 36-75VDC with Single 10-48VDC Backup; Single Input 110-370VDC or 90-264VAC 50/60Hz with Single 10-48VDC Backup
POWER CONSUMPTION (TYP.)	5.5 W
OVERLOAD CURRENT PROTECTION	Present
REVERSE POLARITY PROTECTION	Present
PHYSICAL CHARACTERISTICS	
ENCLOSURE	IP-40 Galvanized Steel
DIMENSIONS (W X D X H)	101.8 (W) x 126.0 (D) x 160.7 (H) mm (4.01 x 4.96 x 6.96 inches) DIN rail mount 114.3 (W) x 129.2 (D) x 203.2 (H) mm (4.50 x 5.09 x 8.00 inches) Panel mount 1 114.8 (W) x 114.3 (D) x 203.2 (H) mm (4.52 x 4.50 x 8.00 inches) Panel mount 2
UNIT WEIGHT (G)	~2500 g

Table 3. Compliance Specification

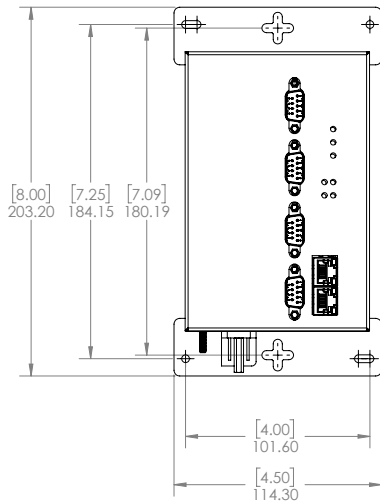| TYPE	STANDARDS
ELECTROMAGNETIC EMISSIONS	FCC Part 15, Class A, CISPR Class A (EN55022)
ELECTROMAGNETIC IMMUNITY	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
SAFETY STANDARDS	EN60950-1
OPERATING ENVIRONMENT	-40°C to +85°C (-40°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

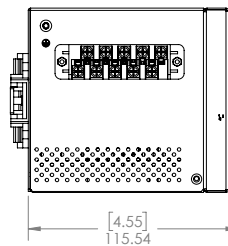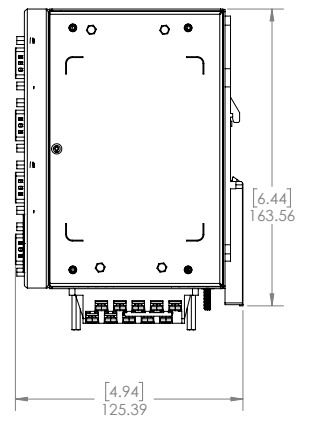| DESCRIPTION	SPECIFICATION		
IEEE STANDARDS	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control		
RFC COMPLIANCE	• RFC 768: UDP • RFC 791: IPv4 • RFC 792: ICMP • RFC 793: TCP	• RFC 1166: IP Addresses • RFC 1901,1902-1907 SNMPv2 • RFC 2131, 2132: DHCP • RFC 1157: SNMPv1	•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

Dimensions

All dimensions are shown in millimeters [Inches].

PANEL MOUNT

DINRAIL MOUNT

[8.00]
203.20

[7.25]
184.15

[7.09]
180.19

[4.00]
101.60

[4.50]
114.30

[4.62]
117.45

[6.96]
176.73

[6.07]
154.13

[4.00]
101.60

[6.44]
163.56

[4.94]
125.39

[4.55]
115.54
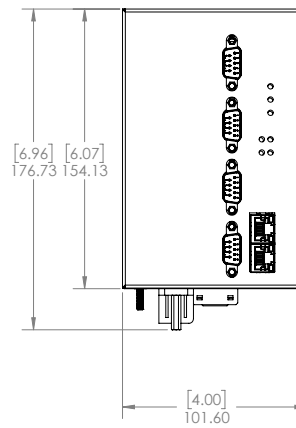
Ordering Information

BASE	POWER SUPPLY	MOUNT	ETHERNET PORT 1	ETHERNET PORT 2	SERIAL PORT 3-6	MOD	DESCRIPTION
iDS6	LV	D	1RJ45	1RJ45	4DB09		
iDS6	|	|	|	|	|	|	Core assembly and packaging
	LV	|	|	|	|	|	Dual Input 10-48VDC
	MV	|	|	|	|	|	Single Input 36-75VDC with Single 10-48VDC Backup
	HV	|	|	|	|	|	Single Input 110-370VDC or 90-264VAC with Single 10-48VDC Backup
		D	|	|	|	|	DIN Rail Mounting
		P	|	|	|	|	Panel Mounting
		N	|	|	|	|	No Mounting Hardware
			1RJ45	1RJ45	|	|	1 X 10/100Base-T(X) RJ45
					4DB09		4 X RS232/422/485 DB9
						C1	Conformal Coating

iDS6 Sample Order Code

iDS6-LV-D-1RJ45-1RJ45-4DB09

Description: iDS6 - 6 Port Device Server, (Power Supply) Dual Input 10-48VDC, (Mount) DIN Rail Mounting, (Ethernet Port 1) 1 X 10 / 100Base-T(X) RJ45, (Ethernet Port 2) 1 X 10/100Base-T(X) RJ45, (Serial Port 3-6) 4 X RS232/422/485 DB9.

The same unit, may be ordered with conformal coating by appending '-C1' to the order code, for example: iDS6-LV-D-1RJ45-1RJ45-4DB09-C1

Description: iDS6 - 6 Port Device Server, (Power Supply) Dual Input 10-48VDC, (Mount) DIN Rail Mounting, (Ethernet Port 1) 1 X 10 / 100Base-T(X) RJ45, (Ethernet Port 2) 1 X 10/100Base-T(X) RJ45, (Serial Port 3-6) 4 X RS232/422/485 DB9. This system will be conformal coated.

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