v1.5 / Dec, 2011

Industrial Media Converter

> Industrial 4-port/8-port slim type serial to Ethernet device server

Features

- Operating Modes : Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Multiple host devices :
 5 host devices: Virtual COM, TCP Server, TCP Client mode;
 4 IP ranges : UDP

IDS-141A/181A

- NAT Pass-Through : the user can manage IDS-181A/141A through NAT router
- Security : SSL data encryption; secured management by HTTPS and SSH IP Access : IP White List
- Update DNS Hostname : DDNS
- Event Warning by Syslog, Email, SNMP trap and Relay
- Configurable by Web-based and Windows utility (DS-Tool)
- Various Windows 0.S. supported : Windows NT/ 2000 / XP / 2003 / VISTA(32/64-bit) / Windows 7(32/64-bit)



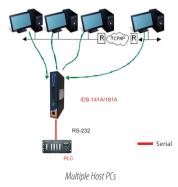
Introduction

IDS-181A/141A is an innovative secure 8-port/4-port RS-232 to 1-port LAN serial to Ethernet device server featuring the standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP, Ethernet modem. In addition, the Windows utility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. The features of NAT Router Pass-Through, and DDNS make it more convenient for administrators to configure ORing's device servers through NAT router from different IP domains or Internet via modem remotely. On the other hand, IDS-181A/141A can simultaneously transfer data up to 5 redundant host PCs to aovid Ethernet connection breakdown or any host PC fails. Further, IDS-181A/141A features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-181A/141A provides dual redundant power inputs, $12 \sim 48$ VDC on terminal block and DC power jack to guarantee a non-stop operation. With wide operating temperature, $-40 \sim 70^{\circ}$ C, and rugged IP-30 housing design, IDS-181A/141A could operate in the harsh industrial environment. Therefore IDS-181A/141A is the best solution to the high demand of secure serial to Ethernet critical data communication.

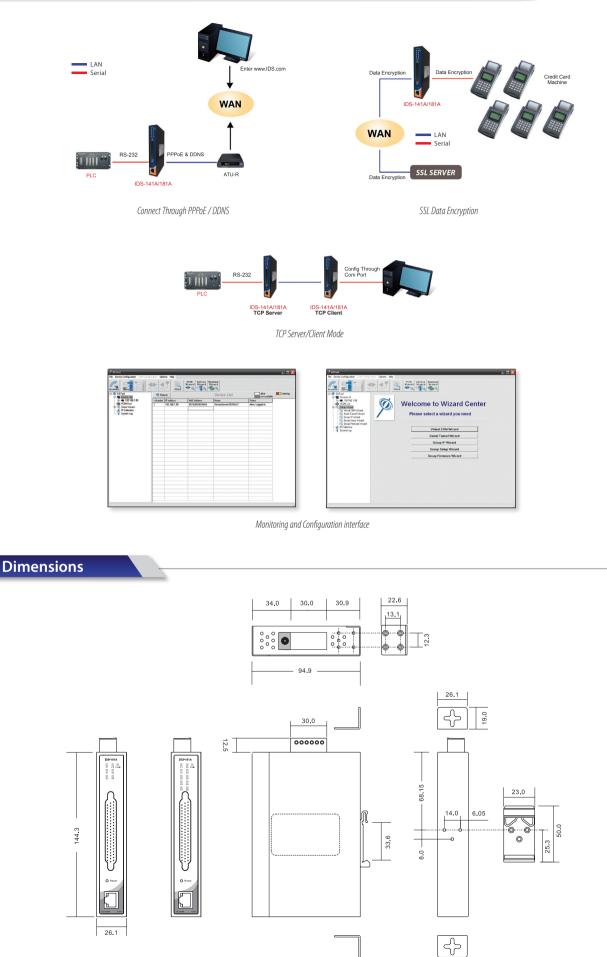
DS-Tool

In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers in the industrial network.





Designed for Rugged Excellence 3-35

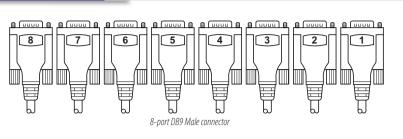


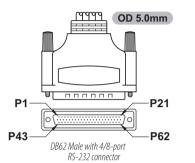
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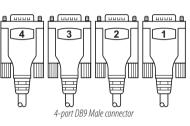
P5

P9









Pin #	RS-232	
1	DCD	
2	RXD	
3	TXD	
4	DTR	
5	GND	
6	DSR	
7	RTS	
8	CTS	
9	N.C.	
RS 232 mode act as DTE		

10

DB9 Male Pin Assignment

Ь

 7
 NTS

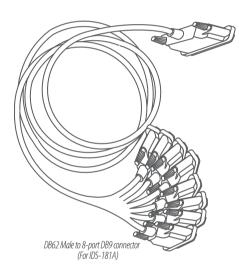
 8
 CTS

 9
 N.C.

 RS 232 mode act as D

P1

P6



DB62 Male to 4-port DB9 connector (For IDS-141A)

Specifications

ORing Device Server Model	IDS-181A	IDS-141A		
Physical Ports				
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX		1		
Serial Ports				
RS-232 Serial port number	8	4		
Connector	DB62 Female (provide DB62 to 8 ports DB9 cable)	DB62 Female (provide DB62 to 4 ports DB9 cable)		
Operation Mode	RS-232			
Serial Baud Rate	110 bps to 115.2 Kbps			
Data Bits	5, 6, 7, 8			
Parity	odd, even, none, mark, space			
Stop Bits	1, 15, 2			
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND			
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR			
Network Features				
Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, H	HTTPS, SMTP, SSL, PPPoE, DDNS		
LED Indicators				
Power Indicator	PWR 1(2) / Ready : Green On : Power is on and functioning Normally. Green Blinking : Located by Administrator.			
10/100Base-T(X) RJ45 Port Indicator		Green for port Link/Act. Amber for port Link/Act at 100Mbps.		
Serial TX / RX LEDs	Red : Serial port is receiving data Green : Serial port is			
Fault Contact				
Relay	Relay output to carry capacity of 1A at 24VDC	Relay output to carry capacity of 1A at 24VDC		
Power				
Redundant Input Power	Triple DC inputs. 12~48VDC on 6-pin terminal block and	Triple DC inputs. 12~48VDC on 6-pin terminal block and power jack		
Power Consumption (Typ.)	4.5 Watts	3.7 Watts		
Overload Current Protection	Present			
Reverse Polarity Protection	Present on terminal block			
Physical Characteristics				
Enclosure	IP-30			
Dimensions (W x D x H)	26.1(W) x 94.9(D) x 144.3(H) mm			
Weight (g)	358 g	355 g		
Environmental				
Storage Temperature	-40 to 85°C (-40 to 185°F)			
Operating Temperature	-40 to 70°C (-40 to 158°F)			
Operating Humidity	5% to 95% Non-condensing			
Regulatory Approvals				
EMI	FCC Part 15, CISPR (EN55022) class A			
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (E EN61000-4-11	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		
Shock	IEC60068-2-27			
Free Fall	IEC60068-2-32			
Vibration	IEC60068-2-6			
Safety	EN60950-1			
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	73,914	76,637		
Warranty	5 years			

Ordering Information

IDS-1AB-A

Code Definition		Serial Port Number	10/100Mbps Ethernet Port Number		
Ontion -4:4		- 4: 4 ports - 8: 8 ports	- 1: 1 port		
	Model Nam	2	Description		
	IDS-181A-US	Industrial 8-port slim type secure serial to Eth adapter	Industrial 8-port slim type secure serial to Ethernet device server with 8xRS-232 and 1x10/100Base-T(X), DB62 connector, US adapter		
Available Model	IDS-181A-EU	Industrial 8-port slim type secure serial to Eth adapter	Industrial 8-port slim type secure serial to Ethernet device server with 8xRS-232 and 1x10/100Base-T(X), DB62 connector, EU adapter		
	IDS-141A-US	Industrial 4-port slim type secure serial to Eth adapter	ernet device server with 4xRS-232 and 1x10/100Base-T(X), DB62 connector, US		
	IDS-141A-EU	Industrial 4-port slim type secure serial to Eth adapter	ernet device server with 4xRS-232 and 1x10/100Base-T(X), DB62 connector, EU		
Packing List • IDS-181A/141A • DIN-Rail Kit • Wall-mount Kit • DB62 to DB9 Cable • ORing Tool CD • Quick Installation Guide		Optional Accessories (Can be pur DR-45 series, 45W DIN-Rail power supply DR-75 series, 75W DIN-Rail power supply DR-120 series, 120W DIN-Rail power supp SDR-240-48, 240W DIN-Rail power supp SDR-480-48, 480W DIN-Rail power supp PAA-121000, 12VDC/1000mA 12W Powe	/ / ply ly		

PAE-121000, 12VDC/1000mA 12W Power Adapter, 65 plug
 PAE-121000, 12VDC/1000mA 12W Power Adapter, EU plug