IDS-141A/181A

Industrial
Ethernet Switch

Industrial
Media Converter

Industrial
Device Server

Industrial Wireless
Access Point

Industrial Cellular
VPN Router

Industrial
M2M Gateway

Accessories

Network
Management Software

❯ *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

- 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 O.S. supported :
  Windows NT/ 2000 / XP / 2003 / VISTA(32/64-bit) / Windows 7(32/64-bit)

Slim Type | SSL | Redundant PWR | -40~70℃ Temperature

RoHS   Lead Free   CE   FC

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, 12~48VDC on terminal block and DC power jack to guarantee a non-stop operation. With wide operating temperature, -40~70℃, 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.
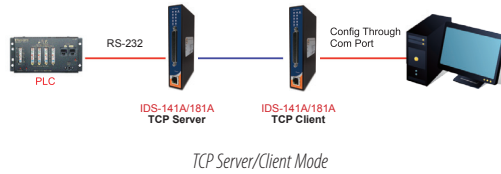
DS-Tool

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.
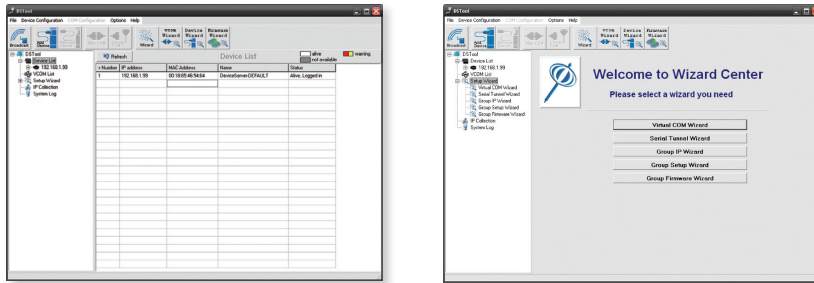
Multiple Host PCs

NAT Router Pass-Through
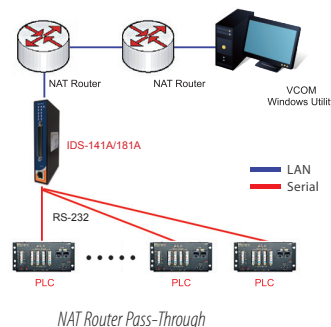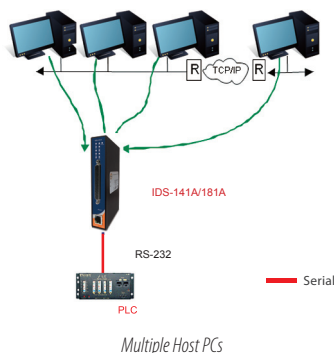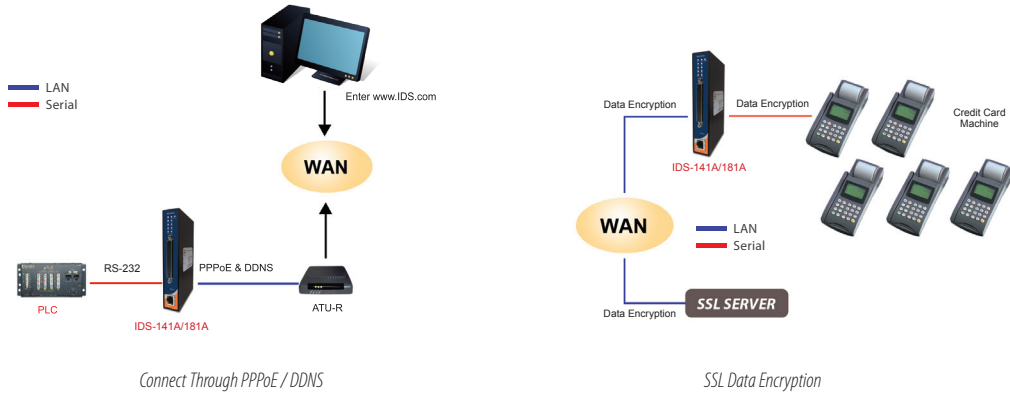
Connect Through PPPoE / DDNS
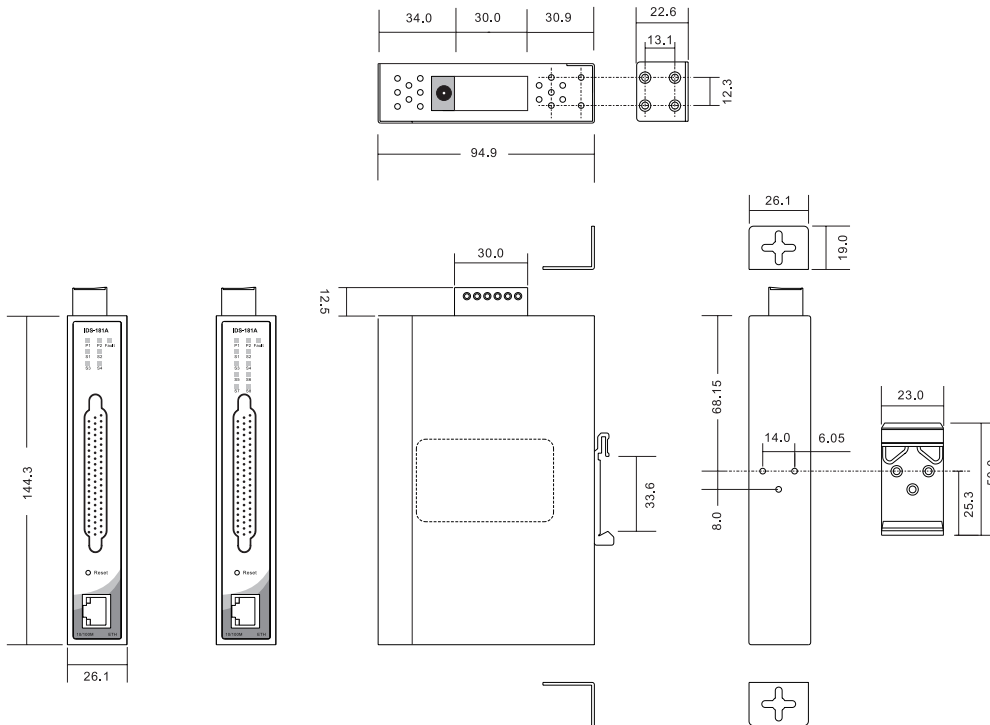
SSL Data Encryption
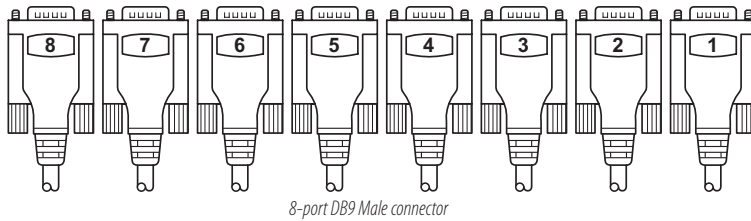
TCP Server/Client Mode

Monitoring and Configuration interface
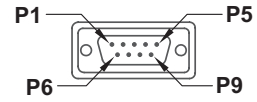
Dimensions

Unit=mm

Pin Definitions

8-port DB9 Male connector

DB9 Male Pin Assignment

OD 5.0mm
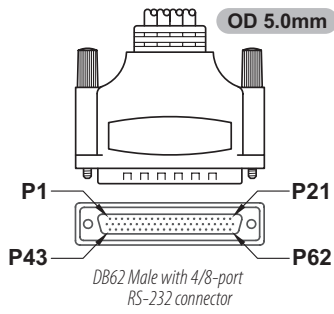
DB62 Male with 4/8-port RS-232 connector
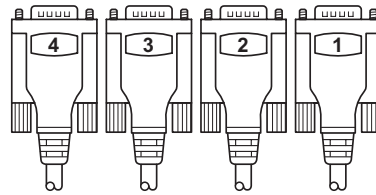
4-port DB9 Male connector

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	
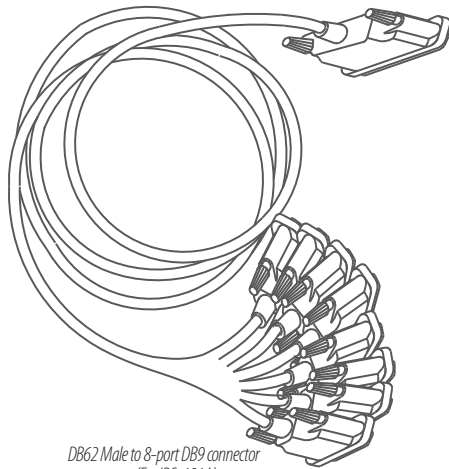
*DB62 Male to 8-port DB9 connector
(For IDS-181A)*
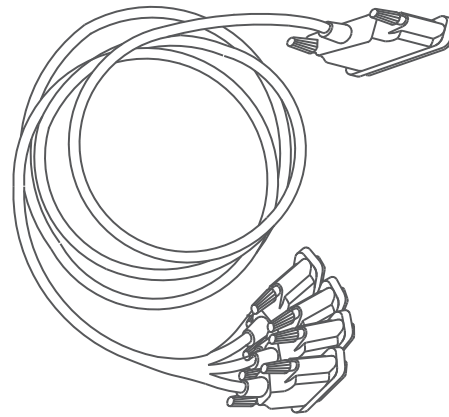
*DB62 Male to 4-port DB9 connector
(For IDS-141A)*

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Industrial Device Server

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	7, 8	
Parity	odd, even, none, mark, space	
Stop Bits	1, 1.5, 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, 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 transmitting data	
Fault Contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input Power	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℃ (-40 to 185℉)	
Operating Temperature	-40 to 70℃ (-40 to 158℉)	
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 (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℃)	73,914	76,637
Warranty	5 years	

Ordering Information

I D S - 1 A B - A

Code Definition	Serial Port Number	10/100Mbps Ethernet Port Number
Option	**- 4:** 4 ports **- 8:** 8 ports	**- 1:** 1 port

	Model Name	Description
Available Model	IDS-181A-US	Industrial 8-port slim type secure serial to Ethernet device server with 8xRS-232 and 1x10/100Base-T(X), DB62 connector, US adapter
	IDS-181A-EU	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 Ethernet device server with 4xRS-232 and 1x10/100Base-T(X), DB62 connector, US adapter
	IDS-141A-EU	Industrial 4-port slim type secure serial to Ethernet device server with 4xRS-232 and 1x10/100Base-T(X), DB62 connector, EU adapter

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 purchased separately)
- DR-45 series, 45W DIN-Rail power supply
- DR-75 series, 75W DIN-Rail power supply
- DR-120 series, 120W DIN-Rail power supply
- SDR-240-48, 240W DIN-Rail power supply
- SDR-480-48, 480W DIN-Rail power supply
- PAA-121000, 12VDC/1000mA 12W Power Adapter, US plug
- PAE-121000, 12VDC/1000mA 12W Power Adapter, EU plug

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