# IDS-141A/181A



# 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)

















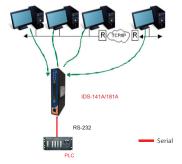
#### Introduction

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.

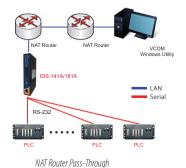
IDS-181A/141A provides dual redundant power inputs,  $12\sim48$ VDC on terminal block and DC power jack to guarantee a non-stop operation. With wide operating temperature, -40~70°C, and rugged IP-30 housing design, IDS-181A/141A could operate in the harsh industrial environment. Therefore IDS-181A/141A is the best solution to the high demand of secure serial to Ethernet critical data communication.

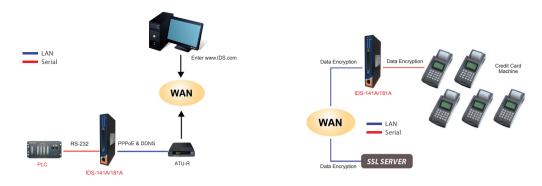
#### **DS-Tool**

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.



Multiple Host PCs



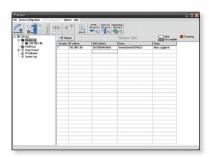


Connect Through PPPoE / DDNS

SSL Data Encryption

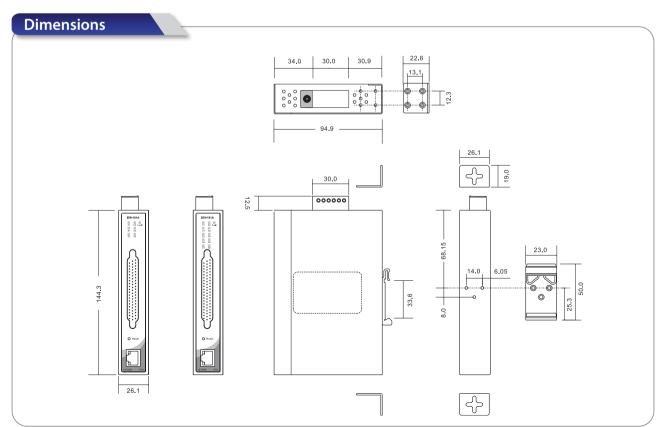


TCP Server/Client Mode



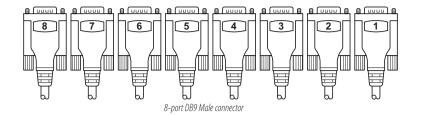


Monitoring and Configuration interface



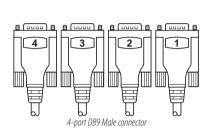
Unit=mm

### **Pin Definitions**

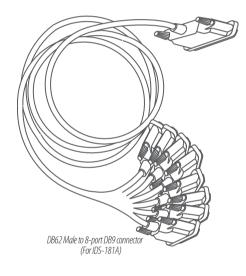


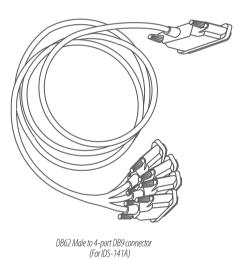


	OD 5.0mm
P1—	<u> </u>
• •	
P43-	P62
	DB62 Male with 4/8-port RS-232 connector



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		





# 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, HTT	PS, SMTP, SSL, PPPoE, DDNS
LED Indicators		
Power Indicator	PWR 1(2) / Ready : Green On : Power is on and functioning Normally.  Gree	en Blinking : Located by Administrator.
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for port Link/Act at 100Mbp:	S.
Serial TX / RX LEDs	Red : Serial port is receiving data Green : Serial port is tra	ansmitting 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 pov	wer 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	255
Weight (g)	358 g	355 g
Environmental	40. 0000 ( 40. 4000)	
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 1E CISDD (ENEED22) class A	
EMS	FCC Part 15, CISPR (EN55022) class A  EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT)	, EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8,
Shock	EN61000-4-11 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	10,031
	5 / 5	

# **Ordering Information**



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

Available Model	Model Name	Description
	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