



# ORing IDS-4312 / IDS-4312+

**Industrial 1 secure serial port to IEEE 802.11 b/g/n wireless device server**

## Features

- High Speed Air Connectivity: WLAN interface support up to 150 Mbps link speed
- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Security: SSL data encryption; secured management by HTTPS and SSH: IP Access: IP White List
- Event Warning by Syslog, Email, SNMP trap
- Configurable by Web-based and Windows utility (**DS-Tool**)
- Various Windows O.S. supported:  
Windows NT/2000/ XP/ 2003/VISTA(32/64bit)/ Windows 7(32/64bit)
- 1KV isolation for PoE PD port (**IDS-4312+**)



## Introduction

IDS-4312 is an innovative secure 1 port RS-232/422/485 to 802.11 b/g/n WLAN, up to 150 Mbps, and 2 port LAN device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, and UDP. In addition, the Windows utility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. On the other hand, IDS-4312 can simultaneously transfer data up to 5 redundant host PCs to avoid Ethernet connection breakdown or any host PC fails. Further, IDS-4312 features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-4312 supports RS-232/422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to guarantee a non-stop operation. Further, IDS-4312+ features PoE PD (Power Device) function, compliant with IEEE802.3af standard, with 1kv isolation on the PoE port. With wide operating temperature, -40~70°C, and rugged IP-30 housing design, IDS-4312 series could operate in the harsh industrial environment. Therefore, IDS-4312 is the best solution to the high demand of secure serial to Ethernet critical data communication.



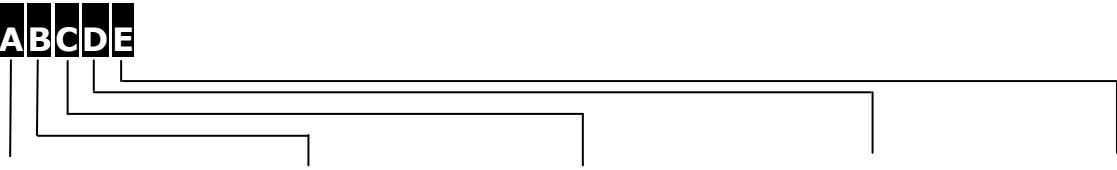
## Specifications

ORing Device Server Model	IDS-4312	IDS-4312+
<b>Physical Ports</b>		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	<b>2</b>	
P.O.E.		P.O.E.Present at ETH1 Power Device (IEEE 802.3af): IEEE 802.3af compliant input interface Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance : 10 <sup>8</sup> ohms min
<b>WLAN feature</b>		
Operation Mode	Client	
Antenna and Connector	1 x External reverse SMA-type antenna connector	
Radio Frequency Type	DSSS, OFDM	
Modulation	IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g/n: OFDM with BPSK, QPSK, 16QAM, 64QAM	
Frequency Band	America / FCC: 2.412~2.462 GHz (11 channels ) Europe CE / ETSI: 2.412~2.472 GHz ( 13 channels )	
Transmission Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n(40MHz): UP to 150 Mbps	
Transmit Power	802.11b: 13.5dBm ± 1.5dBm 802.11g: 13.5dBm ± 1.5dBm 802.11n(2.4G@20MHz): 13.5dBm ± 1.5dBm 802.11n(2.4G@40MHz): 13.5dBm ± 1.5dBm	
Receive Sensitivity	802.11b: -90dBm ± 2dBm@1Mbps 802.11g: -72dBm ± 2dBm@54Mbps 802.11n(2.4G@40MHz,MCS7): -68dBm ± 2dBm	
Encryption Security	WEP: (64-bit, 128-bit key supported) WPA/WPA2:802.11i (WEP and AES encryption) WPA-PSK (256-bit key pre-shared key supported) 802.1X Authentication supported	
<b>Serial Ports</b>		
Connector	DB9 x 1	
Operation Mode	RS-232/422/485	
Serial Baud Rate	110 bps to 460.8 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, RI, GND	
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR	
<b>Network Protocol</b>		
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP	
<b>LED indicators</b>		
Power indicator	3 x LEDs, PWR 1(2)(PoE): Green On: Power is on	
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps.	
Serial TX / RX LEDs:	Red: Serial port is receiving data Green: Serial port is transmitting data	
WLAN LED	WLAN Link /ACT: Green: Blinking	
<b>Power</b>		
Redundant Input power	Dual DC inputs. 12-48VDC on 4-pin terminal block	
Power consumption (Typ.)	3.98 W	

Overload current protection	Present	
Reverse polarity protection	Present on terminal block	
<b>Physical Characteristic</b>		
Enclosure	IP-30	
Dimension (W x D x H)	45 (W) x 81 (D) x 95 (H) mm	
Weight (g)	322 g	331 g
<b>Environmental</b>		
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	
<b>Regulatory approvals</b>		
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	
<b>Warranty</b>	5 years	

## Ordering Information

IDS-ABCDE



Code Definition	Wireless Mode	Serial Port Type	Serial Port Number	Ethernet port Number	POE Identification
Option	- 1: 802.11 b/g - 2: 802.11 a - 3: 802.11 a/b/g - 4: 802.11 b/g/n - 5: 802.11 a/n - 6: 802.11 a/b/g/n	- 1: RS-232 - 2: RS-422/485 - 3: RS-232/422/485	- 1: 1 port	- 2: 2 ports	- "+": P.O.E. PD present at ETH1

Available Model	Model Name	Description
	IDS-4312	Industrial 1-port secure serial to IEEE 802.11 b/g/n wireless device server with 1xRS-232/422/485 and 2x10/100Base-T(X)
	IDS-4312+	Industrial 1-port secure serial to IEEE 802.11 b/g/n wireless device server with 1xRS-232/422/485 and 2x10/100Base-T(X), 1-port PoE P.D.

## Packing List

- IDS-4312 / IDS-4312+ x 1
- Din-Rail Kit x 1
- CD x 1
- Wall-Mount kit x 2
- Quick Installation Guide x 1
- Antenna x 1

## Optional Accessories

- DR-45 series : 45 Watts power supply
- DR-120 series : 120 Watts power supply
- DR-75 series : 75 Watts power supply