



IDS302DW0

2-port RS-232/422/485

Industrial Wireless

Serial Device Server



Introduction

IDS302DW0 allows users to expand 2 RS-232/422/485 ports over Ethernet connection, With SUNIX DPL2000Q High-Performance Ethernet-UART controller, allowing you to network your existing serial devices with only basic configuration. SUNIX Device Server improves solution deployment efficiency to achieve greater reliability in industrial automation applications.

SUNIX Device Server series in order to keep system stable, it supports 2 ways 12~48VDC redundant power input. In addition, software enabled terminators, RS-232/422/485 interface selection are the best user experience, and as well built with many of SUNIX advanced features and technologies, making it the best solution for industrial and harsh automation applications.

Features

- Multi-serial ports supporting RS-232/422/485.
- Optional 10/100M Ethernet and 802.11 b/g/n WiFi.
- Support Real COM, TCP, and UDP socket mode.
- Configure via Telnet/Web/Windows utility.
- 15KV ESD protection for all serial signal lines meeting IEC-61000-4-2 standard.
- Support two ways 12~48VDC redundant power input.
- Support Wall Mounting & DIN-rail Mounting Installation.
- Certified by CE, FCC, VCCI, BSMI, RoHS and Microsoft WHQL approval.

Specifications

Serial Communication

Interface	RS-232/422/485	Baud rate	50bps ~921.6Kbps
Controller	SUNIX DPL2000Q	Stop bit	1, 1.5, 2
BUS	Ethernet	Parity	even, odd, none, mark, space
No. of Port	2-port	Flow Control	Xon/Xoff (software)
FIFO	1Kbyte Hardware / per port	Connector	DB9 Male
Signal	RS-232: DCD, TxD, RxD, RTS, CTS, DTR, DSR, GND, RI RS-422: TxD+, TxD-, RxD+, RxD-, GND RS-485: Data+, Data-, GND		
Protection	±15KV ESD IEC6000-4-2 Air Discharge ±8KV ESD IEC61000-4-2 Contact Discharge ±4KV ESD IEC61000-4-2 Level2 Line-to-Line		

Software

Network Protocols	ICMP, IPv4, TCP, UDP, Telnet, ARP/RARP, HTTP, DHCP
Configuration Options	Web Console、Windows Utility、Telnet Console
Windows COM Drivers	Microsoft Client: Windows Vista / 7 / 8.1 / 10 (x86/x64) Microsoft Server: Windows Server 2008 / 2012R2 (X64)

Ethernet Communication

Number of Ports	1-port, Ethernet Switch Port
Speed	10/100 Mbps, auto MDI/MDIX
Connector	RJ45
Magnetic Isolation Protection	1.0K Built-in

Wireless Communication

Standard Compliance	802.11 b/g/n
ISM Band	2.4GHz
Network Modes	Infrastructure, Ad-Hoc
Transmit Power	802.11n: 13.5dBm $\pm$ 1.5dBm
Receive Sensitivity	150M : -68dBm@10% PER; 130M : -68dBm@10% PER 108M : -68dBm@10% PER; 54M : -72dBm@10% PER 11M : -85dBm@10% PER; 6M : -88dBm@10% PER
Wireless Security	• OpenWEP、SharedWEP • WEPAuto、WPA、WPA2、WPA2-PSK • WPAPSKWPA2PSK • WPA1WPA2 (WPA and WPA2 hybrid mode) • 802.1x
Antenna Connector	RP SMA Jack
Antenna	Frequency : 2.4G ~ 2.5GMHz Peak gain : 4 dBi Impedance : 50 Ω Connector : RP SMA PLUG Length : 163 (mm)

Power Requirements

Input Voltage	12V ~ 48VDC
Power Consumption	12W @ 12VDC
Connector	T3-pin Terminal Block ϕ 2.0mm DC-Jack

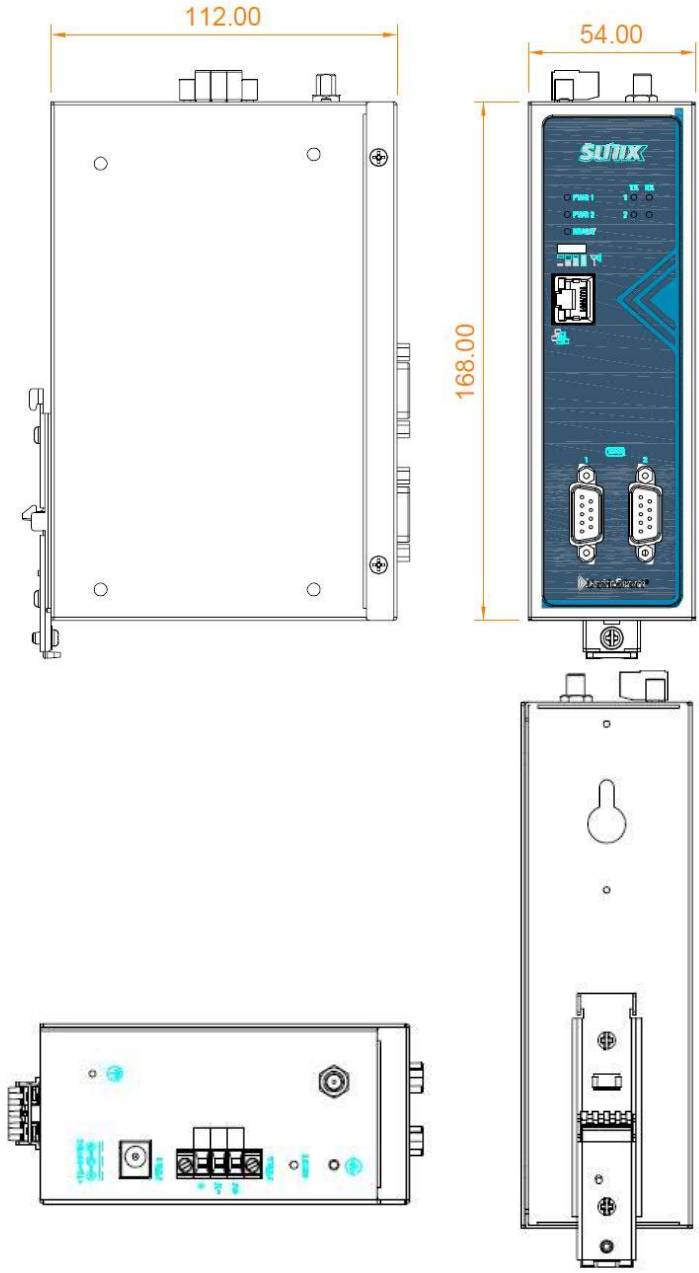
Regulatory Approvals

Hardware EMC	• EUR: CE EN55022 Class A, EN55024 • US: FCC Part 15 Class A • TAIWAN: BSMI: CNS13438 • JAPAN: VCCI
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Environment

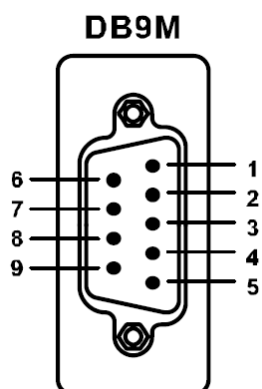
Operation Temperature	0 to 80°C (32 to 176°F)
Operation Humidity	5 to 95% RH (non-condensing)
Storage Temperature	-10 to 85°C (-14 to 185°F)

Physical Characteristics

Housing	Metal IP30 Standard
Weight	800 g
Installation	Wall Mounting & DIN-rail Mounting Kit
Dimensions	54 x 168 x 112(mm), 2.1 x 6.6 x 4.4 (inch) 

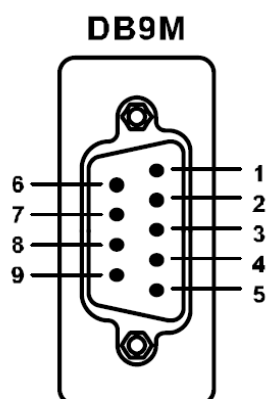
Pin Assignment

■ RS-232



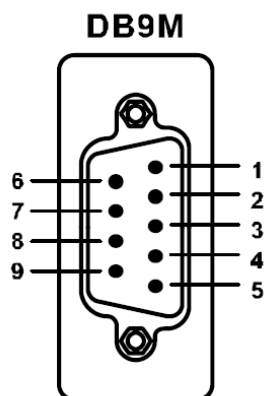
PIN	DB9M
DCD	1
RxD	2
TxD	3
DTR	4
GND	5
DSR	6
RTS	7
CTS	8
RI	9

■ RS-422



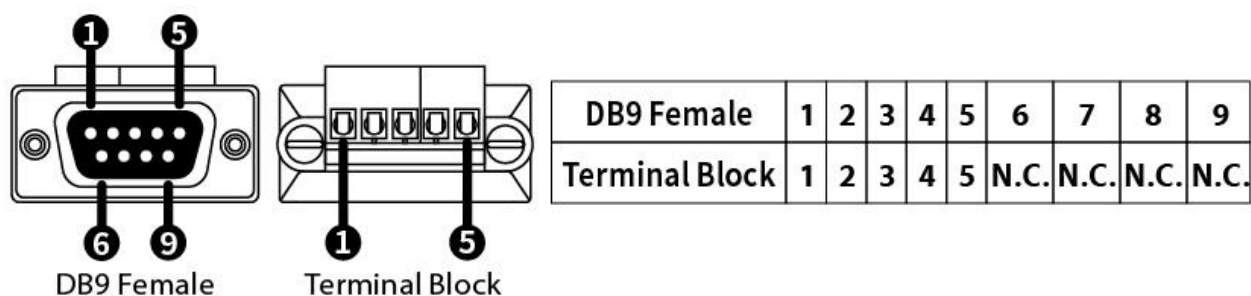
PIN	DB9M
TxD-	1
TxD+	2
RxD+	3
RxD-	4
GND	5

■ RS-485



PIN	DB9M
Data--	1
Data+	2
-	3
-	4
GND	5

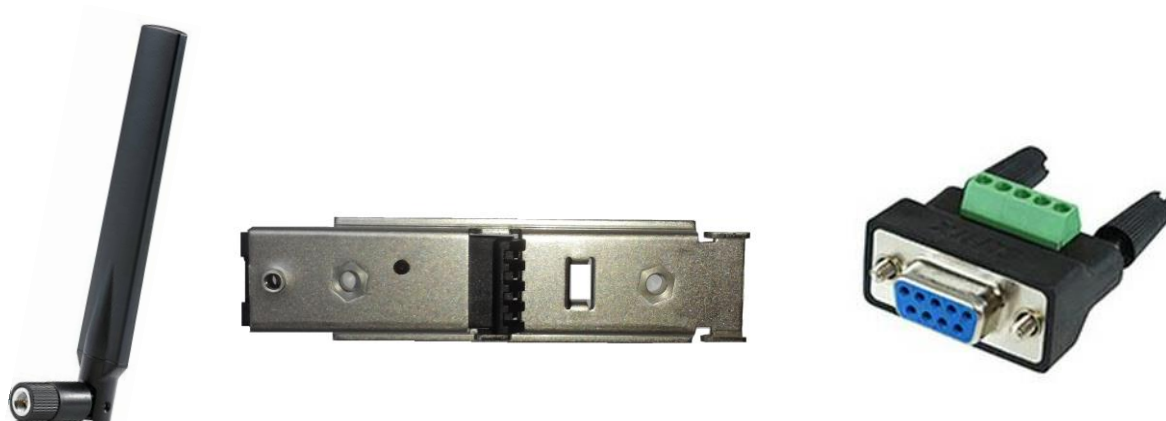
DB9 Female to 5-pin Terminal Block Adapter



Package

Standard

- IDS302DW0, 2-port RS-232/422/485 Industrial Wireless Serial Device Server
- 4 dBi 2.4GHz WiFi Antenna x 1 pcs
- Din rail mounting kit x1 set
- DB9F to 5pin Terminal Block Adapter x1 pcs
- Quick Installation Guide



Optional Accessory

- DB9F to 5pin Terminal Block Adapter

Product Family

■ RS-232/422/485

Port	LAN Port	WiFi	Connector	Baud Rate	ESD Protection	Surge Protection	Isolation Protection	Wide Temp	Model
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDS308DW0
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS308DWS
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDS308DWT
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS308DWW
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDS308D00
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS308D0S
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDS308D0T
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS308D0W
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDS304DW0
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS304DWS
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDS304DWT
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS304DWW
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDS304D00
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS304D0S
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDS304D0T
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS304D0W
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDS302DW0
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS302DWS
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDS302DWT
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS302DWW
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDS302D00
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS302D0S
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDS302D0T
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS302D0W
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDS301DW0
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS301DWS
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDS301DWT
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS301DWW
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDS301D00
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDS301D0S
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDS301D0T
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDS301D0W

■ RS-422/485

Port	LAN Port	WiFi	Connector	Baud Rate	ESD Protection	Surge Protection	Isolation Protection	Wide Temp	Model
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSD08DW0
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD08DWS
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSD08DWT
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD08DWW
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSD08D00
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD08D0S
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSD08D0T
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD08D0W
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSD04DW0
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD04DWS
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSD04DWT
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD04DWW
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSD04D00
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD04D0S
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSD04D0T
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD04D0W
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSD02DW0
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD02DWS
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSD02DWT
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD02DWW
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSD02D00
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD02D0S
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSD02D0T
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD02D0W
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSD01DW0
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD01DWS
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSD01DWT
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD01DWW
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSD01D00
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSD01D0S
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSD01D0T
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSD01D0W

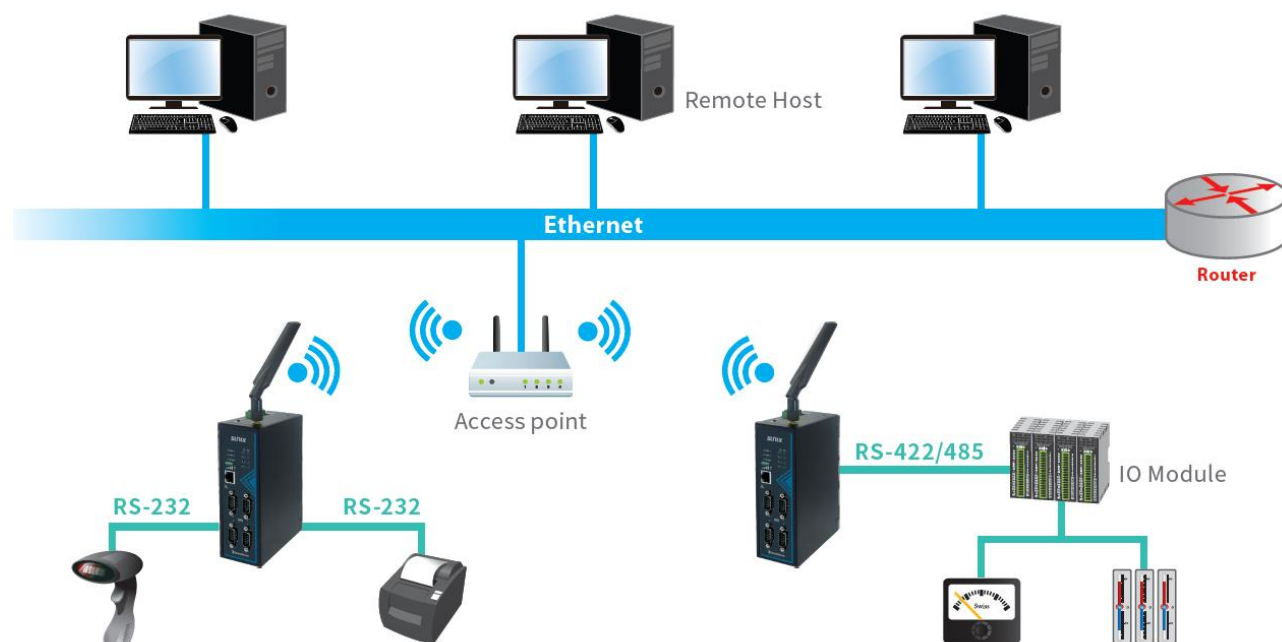
■ RS-485

Port	LAN Port	WiFi	Connector	Baud Rate	ESD Protection	Surge Protection	Isolation Protection	Wide Temp	Model
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSE08DW0
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE08DWS
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSE08DWT
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE08DWW
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSE08D00
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE08D0S
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSE08D0T
8	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE08D0W
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSE04DW0
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE04DWS
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSE04DWT
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE04DWW
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSE04D00
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE04D0S
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSE04D0T
4	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE04D0W
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSE02DW0
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE02DWS
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSE02DWT
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE02DWW
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSE02D00
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE02D0S
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSE02D0T
2	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE02D0W
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSE01DW0
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE01DWS
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSE01DWT
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE01DWW
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSE01D00
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	x	IDSE01D0S
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSE01D0T
1	10/100	x	DB9M	921.6Kbps	±15KV	2KV	1.5KV	o	IDSE01D0W

■ RS-232

Port	LAN Port	WiFi	Connector	Baud Rate	ESD Protection	Surge Protection	Isolation Protection	Wide Temp	Model
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSX08DW0
8	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSX08DWT
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSX08D00
8	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSX08D0T
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSX04DW0
4	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSX04DWT
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSX04D00
4	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSX04D0T
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSX02DW0
2	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSX02DWT
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSX02D00
2	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSX02D0T
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	x	IDSX01DW0
1	10/100	2.4G	DB9M	921.6Kbps	±15KV	x	x	o	IDSX01DWT
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	x	IDSX01D00
1	10/100	x	DB9M	921.6Kbps	±15KV	x	x	o	IDSX01D0T

Application



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