



# IDS-M311

## Industrial 1-port Modbus Gateway with 1xRS-232/422/485 and 1x10/100 Base-T(X)

### Features

- Operating Modes: RTU Master, RTU Slave, ASCII Master, ASCII Slave
- Supports up to 16 TCP connections and 32 requests simultaneously
- Convert between Modbus TCP and Modbus RTU/ASCII
- Provides 1xRS-232/422/485 software selectable serial communication
- Dual DC power inputs
- Configurable by Web Interface
- Various Windows O.S. supported: Windows NT/2000/ XP/ 2003/VISTA(32/64bit)/ Windows 7(32/64bit)
- DIN-rail and Wall mount enabled

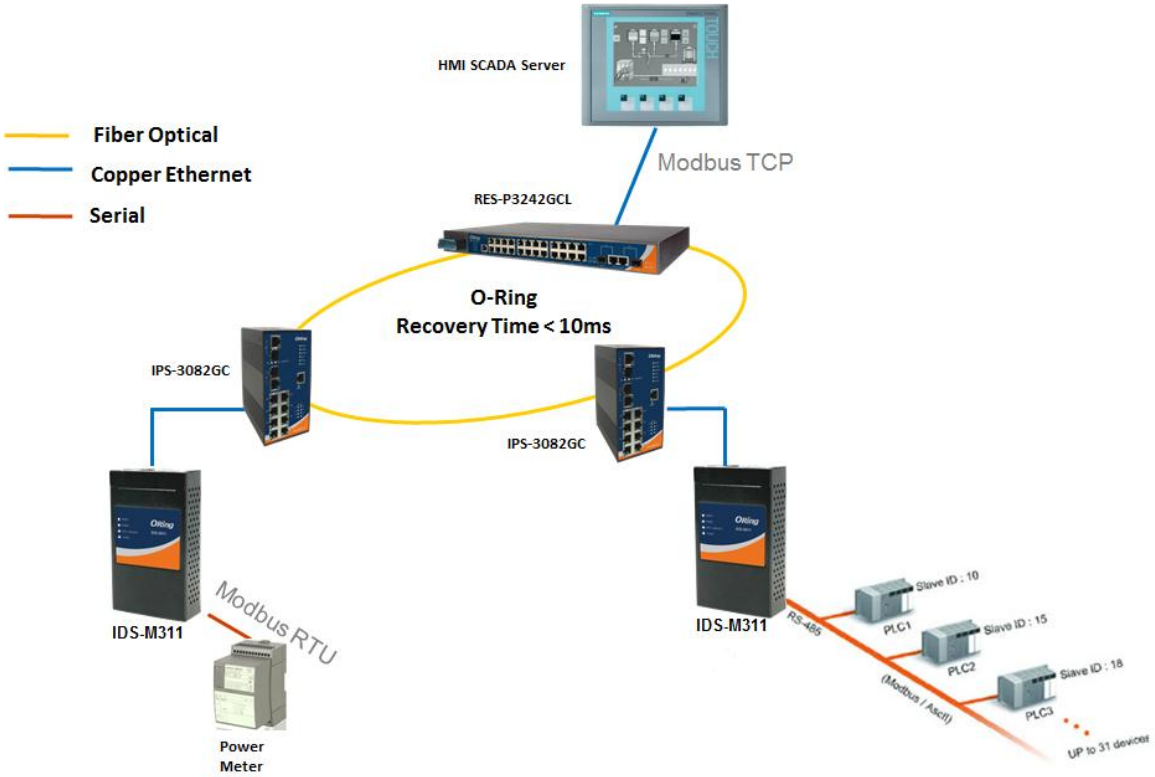


### Introduction

IDS-M311 is an innovative 1-port Modbus Gateway which converts between Modbus TCP and Modbus RTU/ASCII. IDS-M311 is mainly designed for easy integration of Modbus RTU/ASCII devices and network based Modbus TCP devices without changing currently existed structure. While IDS-M311 is able to support up to 31 RTU/ASCII devices in its serial port, thus this model can effectively connect a high density of Modbus nodes to the same network. In addition, the Web Configuration Interface, could configure multiple devices and set up IDS-M311 operation mode for different application requirement. IDS-M311 allows user to select from master or slave mode for user to access Ethernet slave devices or Serial slave devices.

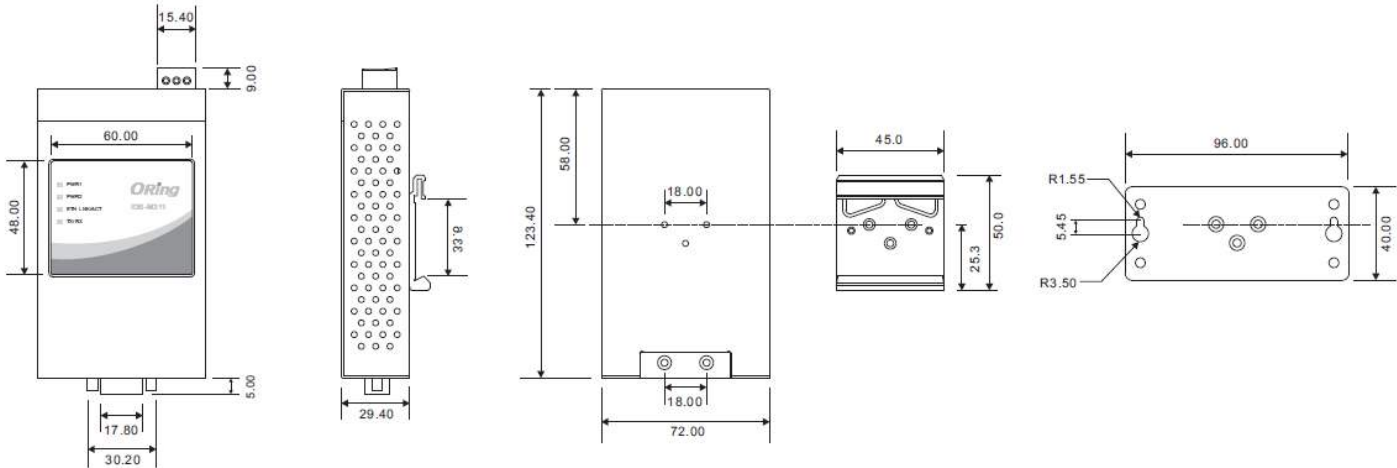
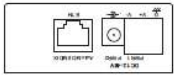
IDS-M311 supports RS-232/422/485 and provides dual redundant power inputs, 12~48 VDC, on DC power jack and terminal block to guarantee a non-stop operation. With wide operating temperature, -10~60°C, and rugged IP-30 housing design, IDS-M311 could operate in the harsh industrial environment. Therefore, IDS-M311 is the best solution to the high demand of secure serial to Ethernet critical data communication.

# Practical Operation



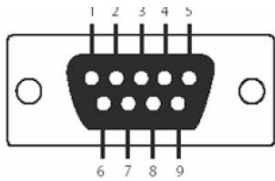
# Dimension

Dimension (Unit =mm)



\* All specifications are subject to change without notice.

## Pin Definitions



DB9 connector

Pin #	RS 232	RS 422	RS 485 ( 4 wire )	RS 485 ( 2 wire )
1	DCD	RXD -	RXD -	
2	RXD	RXD +	RXD +	
3	TXD	TXD +	TXD +	DATA +
4	DTR	TXD -	TXD -	DATA -
5	GND	GND	GND	GND
6	DSR			
7	RTS			
8	CTS			
9	RI			
RS 232 mod act as DTE				

## Specifications

ORing Device Server Model	IDS-M311
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	1
<b>Serial Ports</b>	
Connector	DB9(male) x 1
Operation Mode	RS232 / RS422 / 4(2)-Wire RS485. Which can be configured by Web interface
Serial Baud Rate	110 bps to 115.2 Kbps
Data Bits	5, 6, 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
RS-422	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (4-wire)	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (2-wire)	Data+, Data-,GND
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR
<b>Network Protocol</b>	
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, DNS, SNMP V1/V2c, HTTPS, SMTP, DDNS, PPPoE, Modbus TCP
<b>LED indicators</b>	
Power indicator	PWR 1(2) / Ready: Red On: Power is on and booting up. Red Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly. Green On: Power is on and functioning Normally. Green Blinking: Located by Administrator.
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.
Serial TX / RX LEDs:	Red: Serial port is receiving data Green: Serial port is transmitting data
<b>Power</b>	
Redundant Input power	Dual DC inputs. 12-48VDC on 3-pin terminal block and power jack
Power consumption (Typ.)	4 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
<b>Physical Characteristic</b>	
Enclosure	IP-30
Dimension (W x D x H)	72(W)x29.4(D)x123.4(H) mm (2.83x1.16x4.86 inch.)
Weight (g)	294
<b>Environmental</b>	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-10 to 60°C (14 to 140°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-M3AB**

Code Definition	Serial Port Type	Serial Port Number	Ethernet Port Number
Option	- 1: RS-232 - 2: RS-422/485 - 3: RS-232/422/485	- 1: 1 port	- 1: 1 port

Available Model	Model Name	Description
	IDS-M311	Industrial 1-port Modbus Gateway with 1xRS-232/422/485 and 1x10/100 Base-T(X)

## Packing List

- **IDS-M311 x 1**
- **CD x 1**
- **Quick Installation Guide x 1**
- **Wall-Mount Kit x 1**
- **Din-Rail Kit x 1**

## Optional Accessories

- **DR-45 series : 45 Watts power supply**
- **DR-75 series : 75 Watts power supply**
- **DR-120 series : 120 Watts power supply**
- **PAA-121000, 12VDC/1000mA 12W Power Adapter, US plug**
- **PAE-121000, 12VDC/1000mA 12W Power Adapter, EU plug**