ORing

Quick Installation Guide

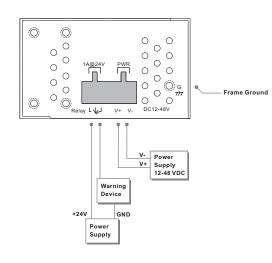
Introduction

IMG-111 Series is an innovative 1 port RS-232 M2M Gateway with 1 port 10/100Base-T(X) port. It could be configured to connect to the internet by dialing up built-in cellular modem to fulfill demands of various applications rapidly. In addition, **IMG-111 Series** can also transfer data into 5 host PCs simultaneously for backup purposes. Therefore, **IMG-111 Series** is one of the best solutions for applications of wireless and serial communication.

Features

- Provide 1 port 10/100Base-T(X) port and 1 SIM card slot
- > 2G GSM/GPRS or 3.5G HSUPA Modem included
- Support Open VPN, PPTP VPN
- \triangleright Support DHCP forwarding through PPTP function.
- > Support IPsec VPN
- > Update DNS Hostname: DDNS
- > Versatile modes & event alarm by e-mail.
- ▷ Event warning by Syslog, Email, SNMP Trap, Relay output
- > Redundant multiple host devices:
- > 5 host devices: Virtual COM, TCP Server, TCP Client mode; UDP:4 IP Ranges
- > 12~48VDC power input on terminal block
- > Rigid IP-30 housing design
- > DIN-Rail and panel mounting enabled

Power Connection Guide



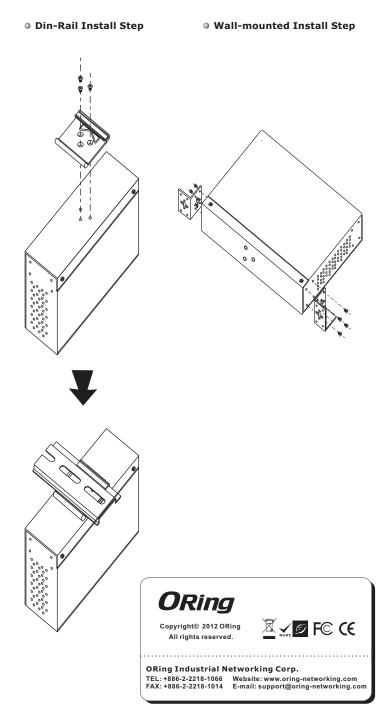
Specifications

ORing M2M Model	IMG-111	IMG-111-2G		
Physical Ports				
10/100 Base-T(X) Ports in RJ4 Auto MDI/MDIX	1			
SIM Card Slot	1			
Cellular Interface	·			
Cellular Standard	GSM / GPRS / EGPRS / EDGE / WCDMA / HSDPA / HSUPA	GSM / GPRS		
Band Option	Dual-band : HSUPA 1900/2100 MHZ Quad-band : GSM / GPRS / EDGE 850/900/1800/1900 MHZ WCDMA / HSDPA 850/900/1900/2100 MHZ	Dual-band (Qual-band) GSM/GPRS 900/1800MHz or 900MHz/1800MHz/850MHz/1900MHz		
Antenna Connector	Reverse SMA			
Antenna	GSM/DCS/UMT antenna x 1			
Serial Ports				
Connector	DB9 Male x 1			
Operation Mode	RS-232			
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			
Serial signals	RS-232: TxD, RxD, GND			
LED Indicators				
Power Indicator	Green on: Power is on			
Status Indicator	Green: System status indication			
Fault Indicator	Amber on: WAN connection link down			
WAN	Green on: Cellular modem is present Green blinking: Cellular modem is transmitting data			
Serial TX/RX LED	Red : Receiving data Green : Transmitting data			
10/100Base-T(X) RJ45 Port Indicator	Green for port Link / Act. Amber for 100Mbps indicator			
Fault Contact				
Relay	Relay output to carry capacity of 1A at 24VDC			
Power				
Input Power	12-48VDC power input on terminal block			
Power Consumption	4.5 Watts			
Physical Characteristic				
Enclosure	IP-30	IP-30		
Dimension (W x D x H)		41(W) x 70(D) x 95(H)mm (1.61x 2.76 x 3.74nch.)		
Weight (g)	388g			
Environmental				
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			
Regulatory Approvals				
EMI	FCC Part 15, CISPR (EN55022) class A EN61000-4-2 (ESD), EN61000-4-3 (EST), EN61000-4-3 (EST), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-6, EN61000-4-11			

IMG-111 Series

Industrial M2M Gateway

Installation



ORing

M2M GATEWAY

Quick Installation Guide

IMG-111 Series

(3) Screw (M3 X3)

(6) Power Cable with power jack

(9) Allen Key (For SIM card

Slot)

3

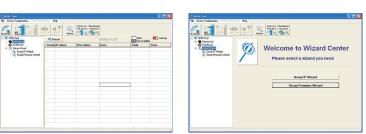
Industrial M2M Gateway

Application

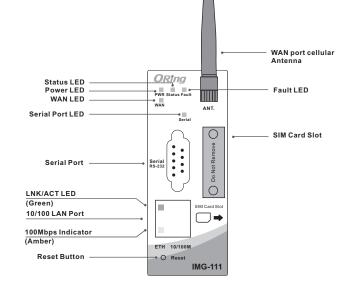
IMG-111 Series, it support 3.5G /2G Modem dial up. The utility-M2M-Tool which is used to manage and monitor all of the serial ports on IMG-

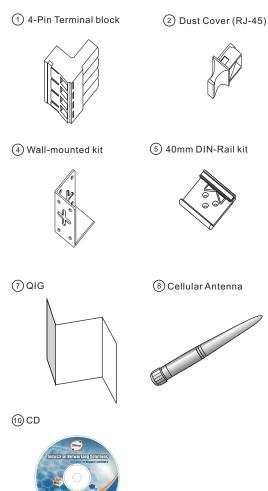


Monitoring and Configuration



Front Panel



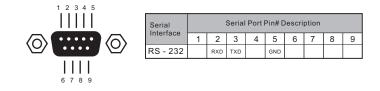


Packing list

Accessory

Model name	Model Description	Accessory
IMG-111	Industrial Cellular 3.5G VPN Router with 1 x10/100Base-T(X) 1xRS-232 M2M Gateway	①X1, ②X1, ③X8, ④X2, ⑤X1, ⑥X1, ⑦X1, ⑧X1, ⑨X1, ⑩X1
IMG-111-2G	Industrial Cellular 2G VPN Router with 1 x10/100Base-T(X) 1xRS-232 M2M Gateway	①X1, ②X1, ③X8, ④X2, ⑤X1, ⑥X1, ⑦X1, ⑧X1, ⑧X1, ⑩X1

Serial Port Assignment



Communication Connections

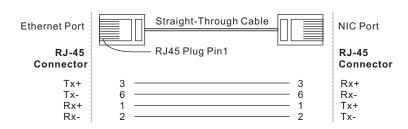
- 10/100Base-T(X) Ethernet Port Connection
- RJ45 (8-pin, MDI) Port Pinouts

RJ45 (8-pin, MDI-X) Port Pinouts

Pin	Signal	
1	Tx+	li i i i i i i i i i i i i i i i i i i
2 3	Tx- Rx+	
6	Rx-	

Signal Rx+ Rx- Tx+	
Tx-	

■ RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring



Pin

■ RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring

Ethernet Port (NIC Port)	Cross-Over Cable	Ethernet Port (NIC Port)
RJ-45 Connector	RJ45 Plug Pin1	RJ-45 Connector
(Rx+) Tx+ (Rx-) Tx- (Tx+) Rx+ (Tx-) Rx-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rx+ (Tx+) Rx- (Tx-) Tx+ (Rx+) Tx- (Rx-)