



# IMG-1312-D

## Industrial 802.11 b/g 3.5G VPN Router with 1 Ports RS-232/422/485 & 4 DI/DO Gateway

### Highlights

- Provide 2 x 10 / 100 Base –T(X) port and SIM card slot
- 3.5G HSUDPA modem included
- Support Open VPN, PPTP VPN
- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/ WPA2 / WPA2-PSK (TKIP, AES) / 802.1x / Radius supported
- 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;
  - 4 IP ranges: UDP
- 4 digital inputs and 4 digital output
- 12~48VDC power input on M12 connector.
- Rugged IP-40 casing design



### Introduction

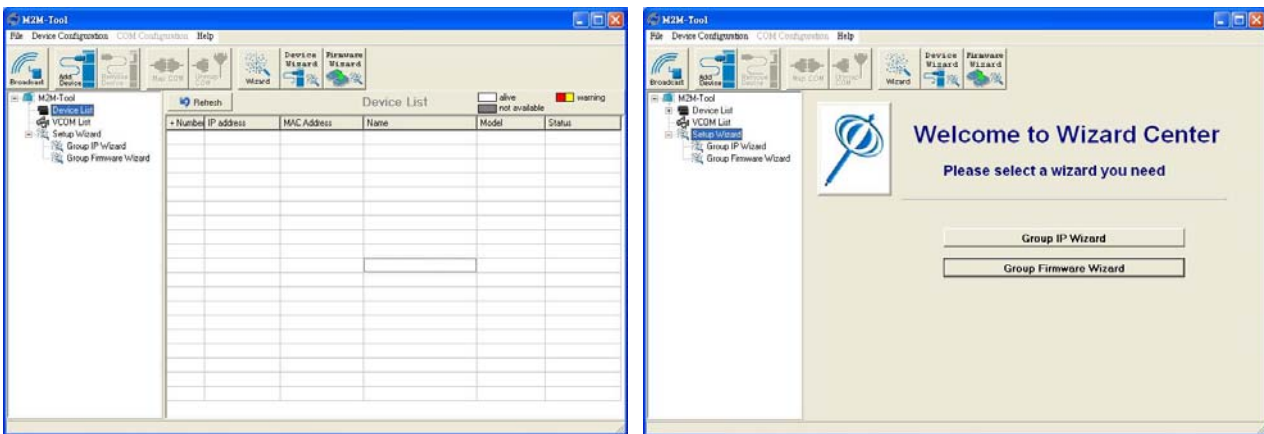
IMG-1312-D is an innovative 1 port RS232/422/485 and IEEE802.11 b/g WLAN Access Point VPN gateway with 2 ports 10/100Base-T(X) ports. It could be configured to connect to the internet by dialing up 3.5G cellular modem to fulfill demands of various applications rapidly and construct the WLAN environment. IMG-1312-D is also equipped with four 5V TTL Digital Inputs and four Digital Outputs for general purpose of demand. In addition, IMG-1312-D can also transfer SSL encryption data into 5 host PCs simultaneously for backup purposes. Therefore, IMG-1312-D is one of the best solutions for applications of wireless and serial communication.

### Application

IMG-1312-D, it supports 3.5G HSUPA Modem dial up. The utility- M2M-Tool which is used to manage and monitor all of the serial ports on IMG-1312-D.



*M2M Gateway Connection*



Monitoring and Configuration interface

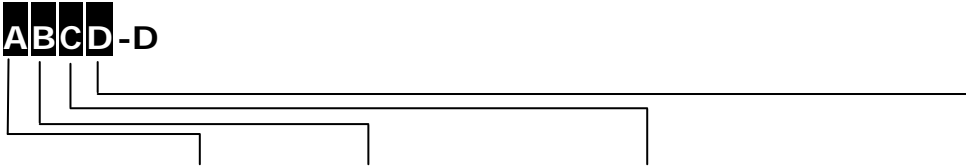
## Specifications

<b>ORing M2M Model</b>	IMG-1312-D
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2
SIM card slot	1
<b>Cellular interface</b>	
Cellular Standard	GSM / GPRS / EGPRS / EDGE / WCDMA / HSDPA / HSUPA
Band options	Dual band : HSUPA 1900 / 2100 MHz Quad band : GSM / GPRS / EDGE 850 / 900 / 1800 / 1900 MHz / WCDMA / HSDPA 850 / 900 / 1900 / 2100MHz
Antenna Connector	Reverse SMA connector x1
Antenna	GSM/DCS/UMT 3G antenna x1
<b>WLAN Feature</b>	
Antenna Connector	Reverse SMA connector x1
Antenna	2.4GHz Wi-Fi ANT x1
Radio Frequency Type	DSSS
Modulation	IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: 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	IEEE802.11b: 1/ 2/ 5.5/ 11 Mbps IEEE802.11g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps
Transmit Power	IEEE802.11b/g: 18dBm
Receiver Sensitivity	-81dBm @ 11Mbps, PER< 8% -64dBm @ 54Mbps, PER< 10%
Encryption Security	WEP: (64-bit ,128-bit key supported) WPA: WPA2 : 802.11i(WEP and AES encryption) WPAPSK (256-bit key pre-shared key supported)

	802.1X and Radius supported TKIP encryption
Wireless Security	SSID broadcast disable
<b>Serial Ports</b>	
Connector	DB9 male x 1
Operation Mode	RS-232/RS-422/RS-485(2W/4W). Which can be configured by utility
Serial Baud Rate	110 bps to 460.8 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, DCD, RTS, CTS, DSR, DTR, RI, GND RS-422 : TX+, TX-, RX+, RX-, GND RS-485 (2W): D+, D-, GND RS-485 (4W): TX+, TX-, RX+, RX-, GND
<b>Digital Input / output</b>	
Digital input	4 digital inputs on terminal block. Power input voltage: 5V TTL
Digital output	4 digital outputs on terminal block. Power output voltage: 5V TTL
<b>LED Indicators</b>	
Power indicator	Green On: Power is on and functioning Normally.
10/100TX RJ45 port indicator	Green for port Link/Act.
WLAN indicator	WLAN Link /ACT: Green: Link
<b>Power</b>	
Power Input	Dual DC inputs. 12-48VDC on 6-pin terminal block
Power consumption (Typ.)	6.5 Watts
Overload current protection	Present
Reverse polarity protection	Present
<b>Physical Characteristic</b>	
Enclosure	IP-30
Dimension (W x D x H)	TBD
Weight (g)	TBD
<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
Warranty	3 years

## Ordering Information

IMG-**ABCD**-D



Code Definition	WLAN Identification	Serial Port Type	Serial Port Number	Ethernet Port Number
<b>Option</b>	- 1: IEEE802.11 b/g mode - 2: IEEE802.11 a mode - 3: IEEE802.11 a/b/g mode	- 1: RS-232 only - 2: RS-422/485 only - 3: Support RS-232/422/485	- 1: 1 port	- 2: 2 port

	Model Name	Description
<b>Available Model</b>	<b>IMG-1312-D_US</b>	Industrial 802.11 b/g 3.5G VPN Router with 1 Ports RS-232/422/485 & 4 DI/DO Gateway, US band
	<b>IMG-1312-D_EU</b>	Industrial 802.11 b/g 3.5G VPN Router with 1 Ports RS-232/422/485 & 4 DI/DO Gateway, EU band