

Industrial Cellular Router/Gateway

# JetWave2414/2114 LTE Cellular Gateway



- Industrial Slim Size Cellular Router/IP Gateway
- JetWave2414 (LTE Cat 4) max. 150M DL/50M UL
- JetWave2114 (LTE Cat 1) max. 10M DL/5M UL
- Dual SIM card slot support
- 2 DI + 2 DO
- 2 ports RS232/422/485 3 in 1 (RJ45 type)
- 4 Fast Ethernet Port
- VPN/Firewall/DMZ and Secure VPN Connectivity
- LAN to 4G/LTE Routing
- 24V(9-48V) DC power input
- Wide Temperature, Heavy Industrial Grade design
- Support GPS (Optional)
- Micro USB



Gateway



2 ports  
RS232/422/485



Heavy  
Industrial



PoE



Wide Temp



GPS



Dual SIM

## Overview

The JetWave2414/2114 is a slim size industrial grade secure Cellular Router/IP Gateway for the Ethernet to cellular machine-to-machine (M2M) communication market. The Cellular Gateway series equips with one embedded 4G LTE Cat1/Cat4 module, dual SIM slot, one MicroSD card slot, 2 serial port and 4 Fast Ethernet port for routing. With the next generation Long Term Evolution (LTE) technology, it supports up to 150Mbps DL/50Mbps UL and 10Mbps DL/5Mbps UL for cellular communication.

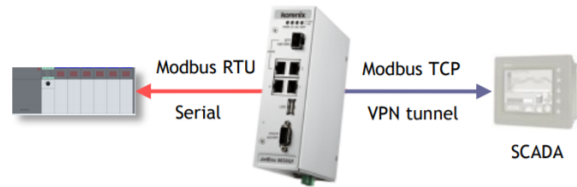
The cellular router/gateway also supports remote management, secure connectivity, firewall/NAT features. The industrial grade design supports 24V(9-30V)DC input, Digital Input and Output, wide operating temperature and heavy industrial grade environment protection.

## JetWave2114/2414 series model

Model Name	LTE	Bandwidth	Ethernet	Serial	DI/DO	Cellular
JetWave2114-EU	Cat 1	10M DL/5M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE - B1/ B3/ B5/ B7/ B8/ B20 TDD-LTE - B38/ B40 /B41 WCDA -B1/ B5/ B8
JetWave2114-AU	Cat 1	10M DL/5M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE -B1/ B2/ B3/ B4/ B5/ B7/ B8/ B28 TDD-LTE - B40 WCDMA-B1/ B2/ B5/ B8
JetWave2114-CN	Cat 1	10M DL/5M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE - B1/ B3/ B8/ TDD-LTE - B34/ B38 /B39/B40/41 WCDA -B1/B8
JetWave2114-US	Cat 1	10M DL/5M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE -B2/B4/B5/B12/B13/B14/B66/B71 WCDMA-B2/ B4/ B5
JetWave2414-EU	Cat 4	150M DL/50M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE - B1/ B3/ B5/ B7/ B8/ B20 TDD-LTE - B38/ B40 /B41 WCDA -B1/ B5/ B8
JetWave2414-AU	Cat 4	150M DL/50M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE -B1/ B2/ B3/ B4/ B5/ B7/ B8/ B28 TDD-LTE - B40 WCDMA-B1/ B2/ B5/ B8
JetWave2414-CN	Cat 4	150M DL/50M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE - B1/ B3/ B8/ TDD-LTE - B34/ B38 /B39/B40/41 WCDA -B1/B8
JetWave2414-US	Cat 4	150M DL/50M UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE -B2/B4/B5/B12/B13/B14/B66/B71 WCDMA-B2/ B4/ B5
JetWave2114-NB	NB-IoT /M1	32Kb DL/ 70Kb UL	4 x FE	2 (3 in 1)	2DI,2DO	FDD-LTE: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B26/B28

## Modbus Gateway for Front-end Control

Modbus protocol is widely used in industrial automation applications; therefore, Modbus Gateway is especially needed in these kind of applications. Modbus Gateway can enable serial Modbus RTU (or Modbus ASCII) devices to communicate with Modbus TCP devices.



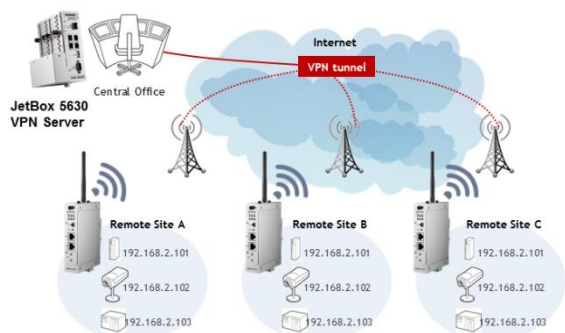
## Next Generation Long Term Evolution (LTE)

The product can support the next generation Long Term Evolution (LTE) 2x2 DL MIMO technology to reach up to 150M Downlink and 50M Uplink speed. The embedded LTE module also backward compatible with UMTS/HSPA connection which enables remote and mobile control to the LAN interface.

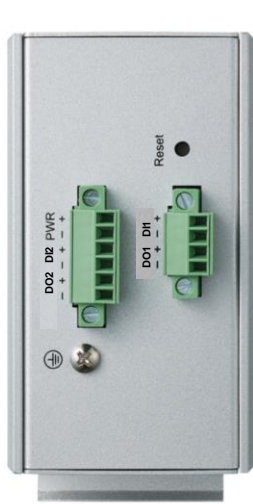


## Secure Remote Connection

The product support VPN for secure remote connection. VPN provides secure communication between the central office and the remote sites through the public Internet. Choose the JetBox 5630 as VPN server, JetWave 2114/2414 series as VPN client is the ideal secure remote connection solution.



# JetWave2414/2114 Outlook



Bottom

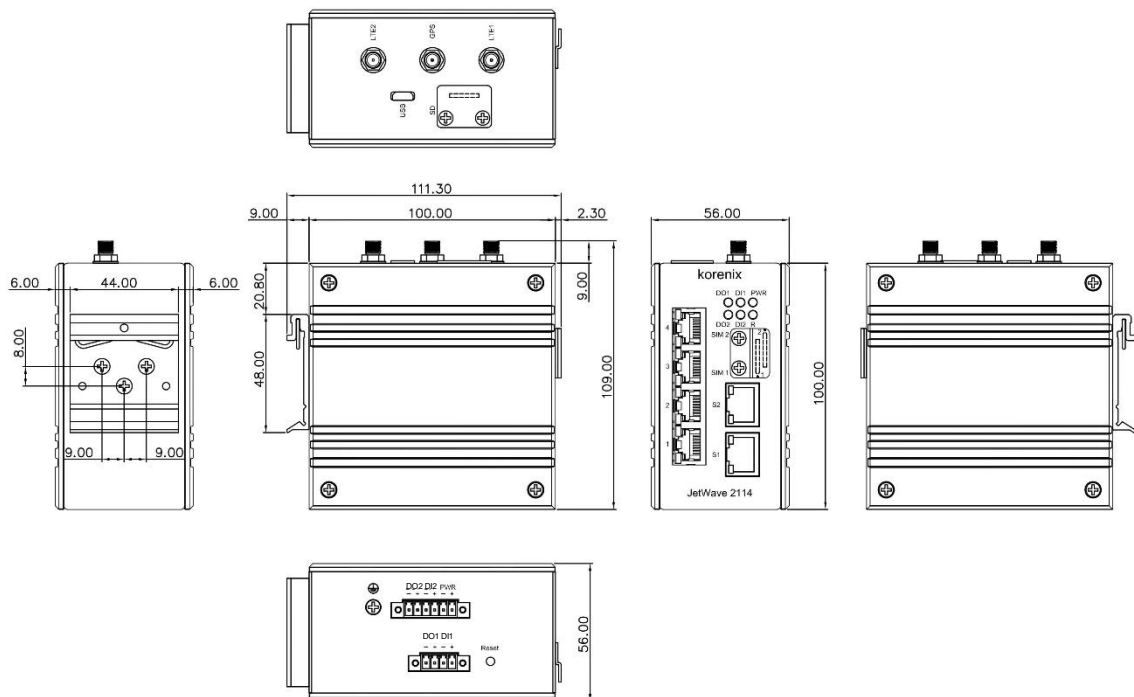


Front



Top

## JetWave 2114 ID DIM Rev.0.1 20181129



## Specification

Technology	
Standard	IEEE 802.3 for 10BaseT IEEE 802.3u for 10/100Base-TX 3GPP Release 11 Long Term Evolution (LTE), 4G compatible
Interface	
Ethernet Port	4x 10/100Base-T(X) RJ-45
Cellular	Mini PCIe LTE for the cellular machine-to-machine (M2M) communication
SIM Socket	2
Storage	Micro SD card slot * 1 Micro USB * 1
Digital I/O	2 DI + 2 DO
Power Input	1x 24VDC (9-48VDC) input
Relay Output	1xRelay Output, 1A@24VDC
Serial interface	2*RS-232/422/485 with RJ45 Type
Reset	Reset Switch, Reset to Default over 7 seconds
LED	PWR, Radio 1, Eth 4, serial2 ,DI2,DO2
SMA Antenna Socket	3 sockets available (2 for LTE 1 for GPS )
Cellular	
LTE Standard	3GPP Release 11 Long Term Evolution (LTE), 1T2R DL-MIMO NB-IoT : max. 32Kbps DL, 70kbps UL LTE category 4: max. 150Mbps DL, 50Mbps UL LTE category 1: max. 10Mbps DL, 5Mbps UL
LTE-E Band	FDD-LTE - B1/ B3/ B5/ B7/ B8/ B20 TDD-LTE - B38/ B40 /B41 WCDMA -B1/ B5/ B8
LTE-AU Band	FDD-LTE -B1/ B2/ B3/ B4/ B5/ B7/ B8/ B28 TDD-LTE - B40 WCDMA-B1/ B2/ B5/ B8
LTE-NB-IoT Band	FDD-LTE: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B26/B28

Management	
Management	Web GUI, Telnet, SNMP, IP Setup, Configuration Backup/Restore, Firmware Upgrade, Reload Default, Ping, DO Events, DO Alarms, SMTP,SD FW upgrade, SD Cellular log record,MQTT.
3G/4G LTE	3G/LTE Configuration, SIM Security, Status, Debug Log, Auto IP Report,DDNS
Router/Gateway	DHCP Server/Client
SNMP	Simple Network Management Protocol v1/v2c/v3, Function-based MIB
Status	System Information, Bridge Table, ARP Table, DHCP Client List
SNMP Trap	SNMP Trap to specific server
System Log	System events log
Utility/NMS	LAN View Utility, Mobile Manager, NMS

### Reliability

Alert tool	Built-in RTC
Reboot trigger	Build-in Watchdog

### Security

Secured Access	HTTPS, SSH, IEEE 802.1X, Radius Server
Firewall	Firewall Setting, DMZ, Port forwarding
VPN	OpenVPN(Client), IPSec VPN

### Power Requirement

Power	DC24V (9-48VDC) input, Passive PoE(24/48VDC)
Power Consumption	Standby Mode: 2W Full Load: Max. 5 Watts *Suggest to reserve 15% tolerance power in practical installation.

### Mechanical

Enclosure	Aluminum housing
External Antenna	Reverse SMA Female connector
Mounting	Din-Rail, Desktop
Dimension	100 mm(H) x 100 mm(D) x 56 mm(W)
Weight	600g with package

### Environmental

Operating Temperature	-40 - 70°C
Operating Humidity	5% - 95% (operating)
Storage Temperature	-40 - 85 °C

### Approvals

Certification	RED: CE EN55032/55024 EN 50121-4 EN 61000-6-2/4 Industrial Environment EN 301 489-1/17/52 EN 301 908-1/-2/-13 (LTE) EN50385/EN62311 MPE assessment Safety EN60950-1 FCC Part 15B E-Mark(Compliance)
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Warranty	5 years
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