

Industrial Cellular PoE Gateway

JetWave 2714GF LTE/WIFI Series



Industrial Cellular + 2GT PSE + 2G SFP Gigabit PoE Switch

- Long Term Evolution (LTE) technology, 2x2 DL-MIMO, max. 100MDL/50M UL
- 2xGigabit 802.3at PoE ports and 2x100/1000Base-X SFP fiber ports, wire-speed LAN switching
- IEEE 802.3at Power Source Equipment, up to 30W per port, Link Partner Detection Protocol, Power budget control, PD Auto Reset
- Rapid Super Ring(RSR), 256 VLANs and QoS, can be integrated with our Managed Switch
- Support LAN to LTE NAT Routing, Dual SIM Redundancy, RSR Redundant Gateway, Virtual Router Redundancy Protocol(VRRP)
- NAT/Firewall/DMZ and Secure VPN Connectivity
- OPCuA for Industrial M2M Communication, SNMPv2c/v3 for NMS, LLDP, Mobile IP Management
- Dual DC54V input, -40-75°C operating temperature
- RED, EN 50121-4

Overview

The product is an industrial grade Cellular LTE Router with multiple PoE and SFP Fiber Ethernet Ports. The product equips with next generation 4G LTE module which supports up to 100M DL and 50M UL, two Gigabit 802.3at PoE Ports supports up to 30W power source to power devices.

Two 100/1000Base-X SFP Fiber port design provides great flexibility for field installation. The LAN switch ports supports wire speed switching, Rapid Super Ring (RSR), 256 VLANs, QoS traffic prioritizing and can be integrated with the industrial Managed Switch.

The product supports Cellular communication features, such as the multiple ports to LTE NAT routing, dual SIM standby, SNMP, LLDP and Mobile Manager Server for remote monitoring. The OPC UA is designed for industrial M2M communication, a popular protocol for industrial automation and M2M applications.

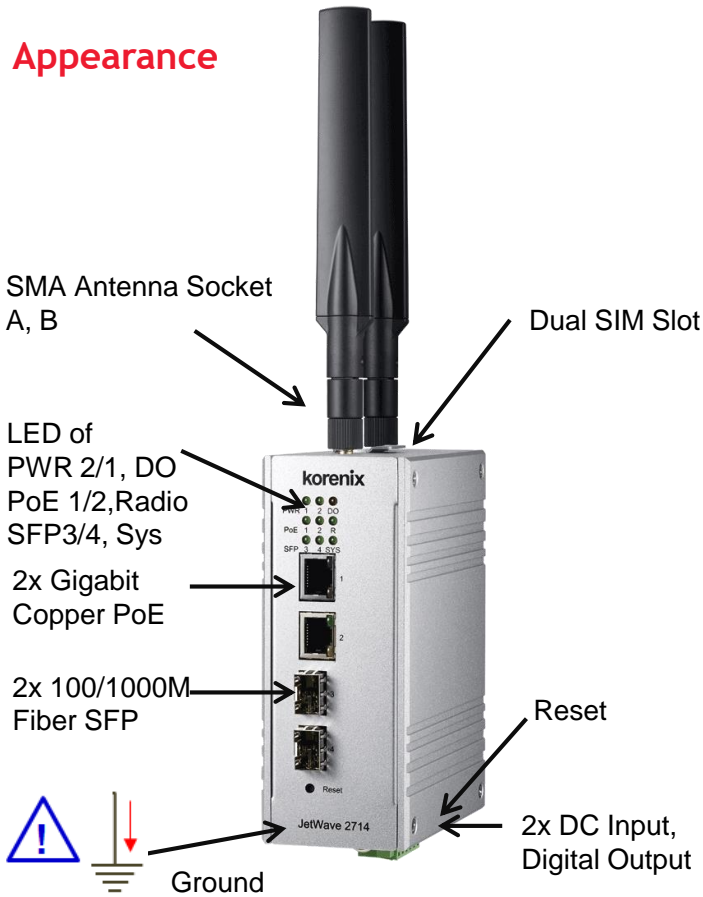
The product also provides different type VPN Client technology and 1-1 OpenVPN Server for secure M2M connectivity. The product supports dual 54V(50-57V)DC input, Digital Output and -40-75°C wide operating temperature.

Model Name	4G LTE	3G UMTS/HSPA	WIFI	Ethernet	USB/DO /COM	SIM	Operating Temp.
JetWave 2714GF LTE-E	LTE-E	Backward Compatible	-	2xGT 802.3at PoE +2x 100/1000M SFP	1xDO	2	-40-75°C
JetWave 2714GF LTE-U	LTE-U	Backward Compatible	-	2xGT 802.3at PoE +2x 100/1000M SFP	1xDO	2	-40-75°C
JetWave 2714GF WIFI-E	-	-	5G/2.4G 802.11ac/n	2xGT 802.3at PoE +2x 100/1000M SFP	1xDO	-	-40-75°C
JetWave 2714GF WIFI-U	-	-	5G/2.4G 802.11ac/n	2xGT 802.3at PoE +2x 100/1000M SFP	1xDO	-	-40-75°C

*LTE-E: 800(20)/900(8)/1800(3)/2600(7)/2100(1)MHz, Backward compatible WCDMA FDD Band 8/3/1

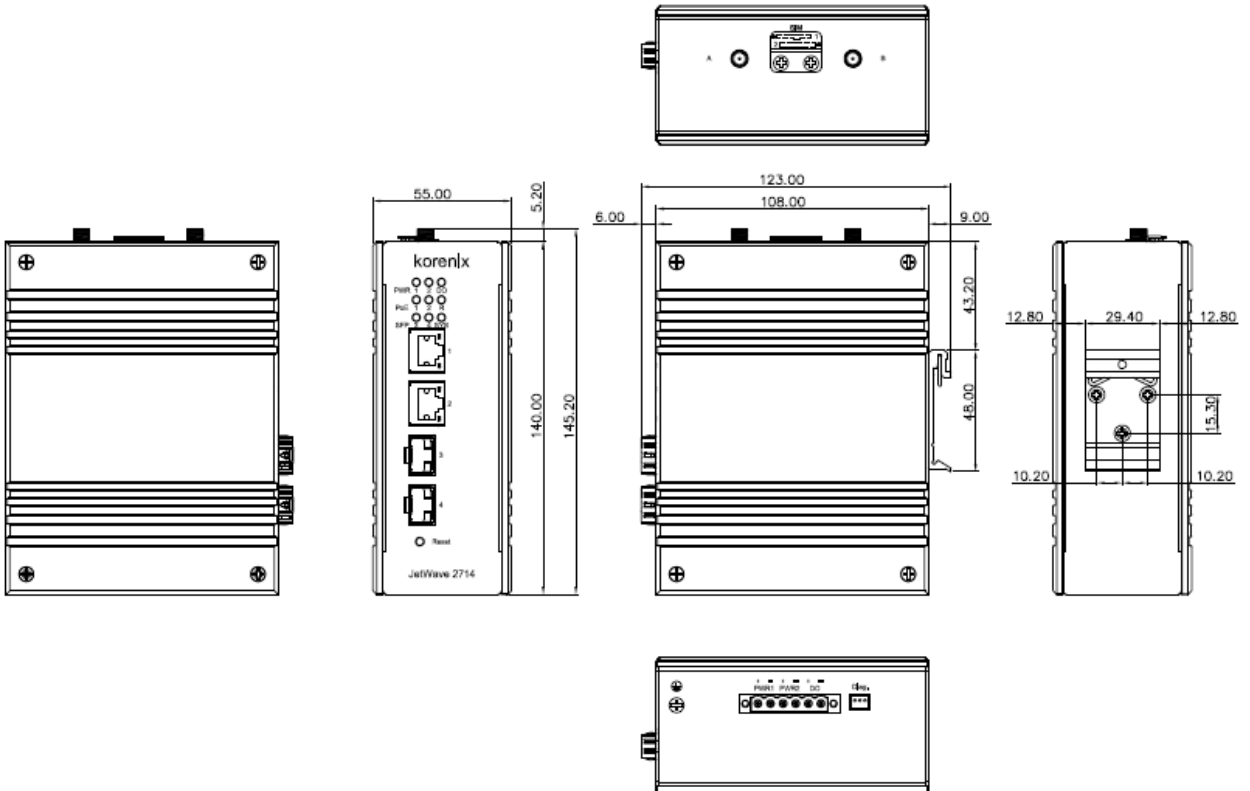
*LTE-U: 700(13)/700(17)/850(5)/AWS(4)/1900(2)MHz, Backward compatible WCDMA FDD Band 5/4/2

Appearance



Antenna	JetWave 2714GF LTE/WIFI
A	LTE/WIFI-Main
B	LTE/WIFI-Aux

Dimension



Specification

Technology	
Standard	IEEE 802.3 for 10BaseT, IEEE 802.3u for 10/100Base-TX, IEEE 802.3ab for 1000BaseT, IEEE 802.3z Gigabit Ethernet Fiber IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE+ 3GPP Release 9 Long Term Evolution (LTE), 3GPP Release 6,7,8 3G UMTS/HSDPA/HSUPA IEEE 802.1Q VLAN, IEEE802.1p Class of Service, IEEE 802.1D-2004 Rapid Spanning Tree Protocol
Interface	
Ethernet Port - RJ-45	2x 10/100/1000Base-T(X) RJ-45 IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE with 60W Total Power Budget
Ethernet Port - Fiber	2x 1000Base-X/100Base-FX SFP Socket
Ethernet Port - Capacity	Switching: Store and Forward or Cut-Throughput Non-blocking Switching Performance, 1Mbit on-chip memory. Throughput: 14,880pps for 10M, 148,800pps for 100M, 1,488,100pps for Gigabit Ethernet Port Packet Size: Typical 64-1522 bytes and up to 10K Jumbo frame MAC Table: 8K MAC Address table with automatic learning and aging
Console	3-pin Diag. socket
Wireless	Cellular: Long Term Evolution Cat. 3 WIFI: Dual Band 5G 802.11ac/2.4G 802.11n 2T2R MIMO *See below detail Radio specification
SIM Socket	2 Nano SIM Sockets (Dual SIM Standby for LTE model)
Power Input / Output	6-pin socket for Dual DC Input (4-pin), PSE Mode A: 1, 2, 3, 6(A) and DO (2-pin) output Dual 50-57VDC Input for 802.3at PoE+ / Dual 44-57VDC Input for 802.3af PoE
Relay Output	1xRelay Output, 1A@24VDC for LAN/Power Failure
Reset	Reset Switch, Reset to Default over 7 seconds
LED	System: PWR, Radio 1, DO, POE Ethernet Copper Port Link/Speed LED, Ethernet Fiber Link/Act LED
SMA Antenna Socket	2x SMA Female Reverse for LTE 2T2R MIMO Nylok pre-applied; A: LTE-Main, B: LTE-Aux
Cellular LTE	
LTE Standard	3GPP Release 9 Long Term Evolution (LTE), 2x2 DL-MIMO LTE category 3: max. 100 Mbps DL, 50 Mbps UL Backward compatible with UMTS/HSPA+/GSM/GPRS/EDGE
LTE-E Band	LTE: 800/900/1800/2600/2100 MHz, FDD-Band (20,8,3,7, 1) UMTS/HSPA+: 900/1800/2100 MHz, FDD-Band (8,3,1)
LTE-U Band	LTE: 700/700/850/AWS(1700/2100)/1900 MHz, FDD-Band (13,17,5,4,2) UMTS/HSPA+: 850/AWS(1700/2100)/1900 MHz, FDD-Band (5,4,2)
Attached Antenna	LTE: 791-960Mhz:1 dBi/1710-1880Mhz: 3dBi/1920-2170Mhz:2.5dBi/2500-2700Mhz:3.5dBi peak gain, -40-85°C temperature, RP SMA Plug, Black Color
WIFI	
Standard	5G 802.11ac/2.4G 802.11n Software Selectable
Operating Frequency	FCC : 2.412-2.462GHz, 5.180 ~ 5.240GHz, 5.725-5.825 GHz CE : 2.412-2.472GHz, 5.180 ~ 5.240GHz, 5.500 ~ 5.700 GHz (Programmable for different country regulations)
MIMO	2T2R
RF Modulation	802.11g/n: OFDM (BPSK,QPSK,16QAM,64QAM, 256QAM)
RF Output Power	2.4G 11n 20/40MHz: up to 21dBm; 5G 11ac/n 20/40/80MHz: up to 19dBm <20dB EIRP for CE (ETSI 300 328, include 4.6/3.5dBi default antenna)
RF Sensitivity	2.4G 11n 20/40MHz: -70~-94dB, 5G 11ac/n 20/40/80MHz: -60~-90dB (Check User Manual)
Attached Antenna	5G 4.6dBi/2.4G 3.5dBi omin-direction, -40-85°C temperature, RP SMA Plug, White Color

Management	
Management	Web GUI, Telnet, SNMP, IP Setup, Management VLAN ID, Configuration Backup/Restore, Firmware Upgrade, Reload Default, Ping, DO Events, DO Alarms, SNTP, Cellular Time
WLAN Setup (WIFI Model Only)	Multiple SSID, Radio on/off, SSID Broadcast, Frequency selection, VLAN ID, Advanced Settings, Traffic Shaping, Link Fault Pass-Through(Link Integration)
Cellular LTE (LTE Model Only)	Cellular Configuration/Status, SIM Security, DDNS, Watchdog, Mobile Management Client, Dual SIM Standby
Router/Gateway	NAT Routing, DHCP Server/Client
L2 Switch	IEEE 802.1Q VLAN, max. 256 VLANs, Quality of Service for traffic prioritizing, Link Layer Discovery Protocol, IGMP Snooping, Port Security
PoE Control	Port/System Budget control, operation mode, PoE Scheduling, Link Partner Link Detect
Redundancy	Rapid Super Ring (RSR), RSR Redundant Gateway, Virtual Router Redundancy Protocol (VRRP), Rapid Spanning Tree Protocol
SNMP	Simple Network Management Protocol v1/v2c/v3, Function-based MIB, SNMP Trap
Status & Log	System Information, ARP Table, DHCP Client List, System Event Log
OPCuA	OPCuA for Industrial M2M communication
Utility/NMS	Korenix View, Korenix Mobile Manager, Network Management System (Web Download)
Security	
Secured Access	HTTPS, SSH, TACACS+, IEEE 802.1X(WIFI Model only), Radius Server(WIFI model only)
Firewall	Firewall Setting, DMZ, Port forwarding
VPN	IPSec, OpenVPN
Power Requirement	
Power	Dual DC54V (50-57VDC) input for 802.3at PoE
Power Consumption	Standby Mode: 6W (Power on only) Full Load: Max. 66 Watts *Suggest to reserve 15% tolerance power in practical installation.
Mechanical	
Enclosure	Aluminum housing
External Antenna	2x Reverse SMA Female connector, Nylok anti-loosen paste
Mounting	Din-Rail
Dimension	140 mm(H) x 115 mm(D) x 55mm(W)
Weight	975g with package
Environmental	
Operating Temp./ Humidity	-40 - 75°C / 5% - 95%
Storage Temperature	-40 - 85 °C
Approvals	
Certification	RED: CE EN55022/55024 EN 61000-6-2/4 Industrial Environment EN 301 489-1/17/52 EN 301 908-1/-2/-13 (LTE), EN 301893 V2.1.1, EN 300 328 V2.1.1 (WIFI) EN50385/EN62311 MPE assessment Safety EN60950-1 FCC Part 15C/15E; FCC ID: TBD (LTE), SSA-JW1223 (WIFI)
Warranty	5 years
Ordering Information	
JetWave 2714GF LTE-E	Industrial 4G LTE + 2GT PSE + 2G SFP Wireless PoE Gateway, LTE Band 20/8/3/7/1
JetWave 2714GF LTE-U	Industrial 4G LTE + 2GT PSE + 2G SFP Wireless PoE Gateway, LTE Band 13/17/5/4/2
JetWave 2714GF WIFI-E	Industrial 802.11ac WIFI + 2GT PSE+ + 2G SFP Wireless PoE Gateway, 5G 11ac/2.4G 11n
JetWave 2714GF WIFI-U	Industrial 802.11ac WIFI + 2GT PSE + 2G SFP Wireless PoE Gateway, 5G 11ac/2.4G 11n
Includes	Product Unit, Quick Installation Guide, Safety Instruction Default Antennas: 2x LTE(Black color) or 2xWIFI(White Color) *Please download user manual, View/Mobile Manager utility from Korenix Web Site