

OnCell G3470A-LTE Series

Industrial LTE Cat 3 cellular gateways



Features and Benefits

- LTE band support, EU models: 2100/1800/2600/900/800 MHz (B1/B3/B7/B8/B20)
- LTE band support, US models: 1900/AWS/850/700/700/1900 MHz (B2/B4/B5/B13/B17/B25)
- Built-in high-speed 4-port Ethernet switch
- Industrial design with dual power inputs and built-in DI/DO support
- Cellular link redundancy with dual-SIM GuaranLink support
- Antenna and power isolation design to protect against interference

Certifications



Introduction

Moxa's OnCell G3470A-LTE Ethernet IP gateway, with LTE band support, provides a higher cellular bandwidth and more reliable connection to your Ethernet network for cellular applications. With an integrated 4-port Gigabit Ethernet switch and LTE support, the OnCell G3470A-LTE offers a faster cellular connection with a lower total cost of ownership. To enhance reliability, a key for industrial users, the OnCell G3470A-LTE provides isolation for both power and antenna inputs. Coupled with high-level EMS and wide-temperature support, the OnCell G3470A-LTE provides the highest level of device stability in any rugged environment. In addition, with dual-SIM and dual-power input features, the OnCell G3470A-LTE offers network redundancy to ensure uninterrupted connectivity for your applications.

Multi-Band Support

- EU Model: 2100/1800/2600/900/800 MHz (B1/B3/B7/B8/B20)
- US Model: 1900/AWS/850/700/700/1900 MHz (B2/B4/B5/B13/B17/B25)

Isolation and Redundancy Design

- Dual power inputs for power redundancy
- Dual-SIM support for cellular connection redundancy
- Antenna isolation for protection against radio interference
- Power isolation for power source insulation protection
- GuaranLink for reliable cellular connectivity

Specifications

Cellular Interface

Cellular Standards	GSM, GPRS, EDGE, UMTS, HSPA, LTE CAT-3
Band Options (EU)	LTE Band 1 (2100 MHz) / LTE Band 3 (1800 MHz) / LTE Band 7 (2600 MHz) / LTE Band 8 (900 MHz) / LTE Band 20 (800 MHz) UMTS/HSPA 2100 MHz / 1900 MHz / 850 MHz / 800 MHz / 900 MHz
Band Options (US)	LTE Band B2 (1900 MHz) / LTE Band B4 (AWS) / LTE Band B5 (850 MHz) / LTE Band B13 (700 MHz) / LTE Band B17 (700 MHz) / LTE Band B25 (1900 MHz) UMTS/HSPA 2100 MHz / 1900 MHz / AWS / 850 MHz / 900 MHz Universal quad-band GSM/GPRS/EDGE 850 MHz / 900 MHz / 1800 MHz / 1900 MHz
LTE Data Rate	20 MHz bandwidth: 100 Mbps DL, 50 Mbps UL 10 MHz bandwidth: 50 Mbps DL, 25 Mbps UL
HSPA Data Rates	42 Mbps DL, 5.76 Mbps UL
EDGE Data Rates	237 kbps DL, 237 kbps UL

GPRS Data Rates	85.6 kbps DL, 42.8 kbps UL
No. of SIMs	2
SIM Control Voltage	3 V
Cellular Antenna Connectors	2 SMA female

Ethernet Interface

Total Port Count	4
10/100/1000BaseT(X) Ports (RJ45 connector)	4

Ethernet Software Features

Management	ARP, DDNS, DHCP server, DNS, HTTP, SMTP, SNMPv1/v2c/v3, TCP/IP, UDP, Telnet, Web Console, Serial Console, Remote SMS Control, Wireless Search Utility, OnCell Central Manager, GuaranLink
Security	HTTPS, IPsec, SSH
Firewall	Filter: MAC, IP protocol, port-based, Access IP list
Routing	NAT, Port forwarding
Time Management	SNTP

IPsec VPN

Authentication	PSK/X.509/RSA
Encryption	DES, 3DES, AES, MD5, SHA-1, DH2, DH5

Input/Output Interface

Alarm Contact Channels	1, Relay output with current carrying capacity of 1 A @ 24 VDC
Digital Inputs	1 +13 to +30 V for state 1 3 to -30 V for state 0
Buttons	Reset button

LED Interface

LED Indicators	PWR1, PWR2, READY, FAULT, CELLULAR SIGNAL, SIM1, SIM2, 2G, 3G, 4G, GPS
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GPS Interface

GPS Antenna Connector	1 SMA female, GPS (1575.42 MHz), GLONASS (1602 MHz)
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Power Parameters

Input Current	0.7 A @ 12 VDC, 0.2 A @ 48 VDC
Input Voltage	12 to 48 VDC, Redundant dual inputs
Power Connector	Terminal block
Reverse Polarity Protection	Supported

Physical Characteristics

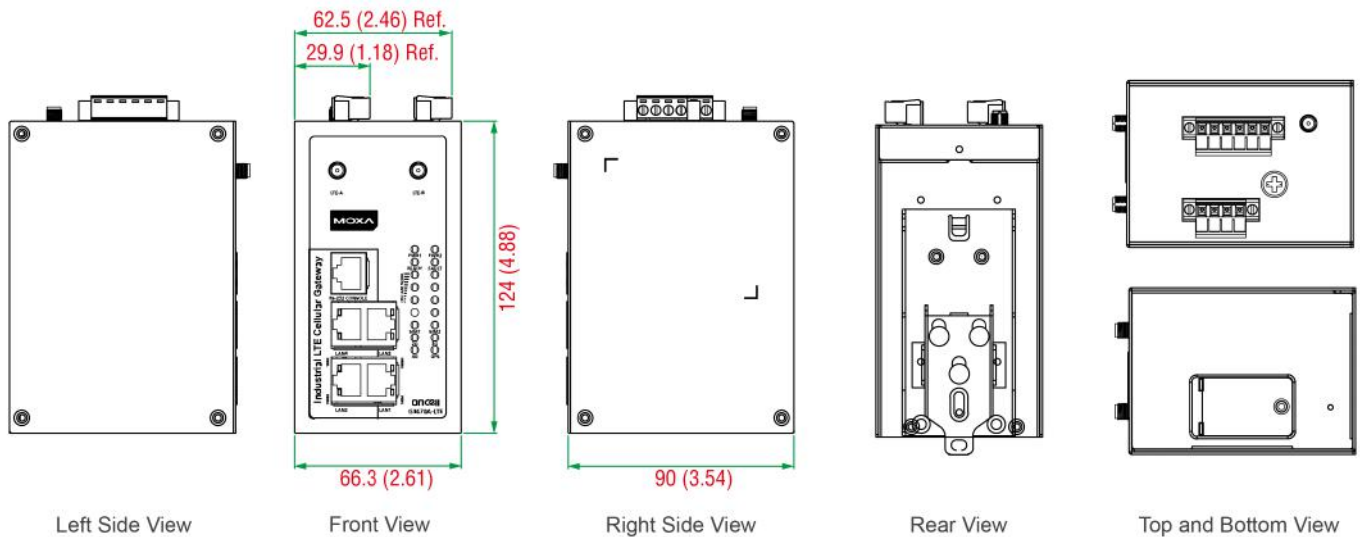
Housing	Aluminum
IP Rating	IP30
Dimensions	66.3 x 124 x 90 mm (2.61 x 4.88 x 3.54 in)

Weight	1,300 g (2.87 lb)
Installation	DIN-rail mounting
Environmental Limits	
Operating Temperature	Standard Models: -30 to 55°C (-22 to 131°F) Wide Temp. Models: -30 to 70°C (-22 to 158°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
Safety	UL 60950-1
EMC	EN 61000-6-2/-6-4
EMI	CISPR 22, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 1 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Radio Frequency	FCC ID N7NMC7355, EN 301 489-1, EN 301 489-7, EN 301 511
MTBF	
Time	327,326 hrs
Standards	Telcordia SR332
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x OnCell G3470A-LTE Series LTE cellular gateway ¹
Installation Kit	1 x DIN-rail kit
Antenna	2 x UMTS/LTE
Terminator	1 x GPS connector terminator
Accessory	5 x plastic RJ45 protective caps for serial console and Ethernet ports
Documentation	1 x quick installation guide 1 x warranty card

1. An activated SIM card (not included) must be provided by a third party Cellular Service Provider.

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Cellular Standard	LTE Band	Operating Temp.
OnCell G3470A-LTE-US	4G LTE	US Band (B2/B4/B5/B13/B17/B25)	-30 to 55°C
OnCell G3470A-LTE-US-T	4G LTE	US Band (B2/B4/B5/B13/B17/B25)	-30 to 70°C
OnCell G3470A-LTE-EU	4G LTE	EU Band (B1/B3/B7/B8/B20)	-30 to 55°C
OnCell G3470A-LTE-EU-T	4G LTE	EU Band (B1/B3/B7/B8/B20)	-30 to 70°C

Accessories (sold separately)

Antennas

ANT-LTEUS-ASM-01	GSM/GPRS/EDGE/UMTS/HSPA/LTE, omni-directional rubber duck antenna, 1 dBi
ANT-LTE-ASM-02	GPRS/EDGE/UMTS/HSPA/LTE, omni-directional rubber duck antenna, 2 dBi
ANT-LTE-ANF-04	GSM/GPRS/EDGE/UMTS/HSPA/LTE, omni-directional outdoor antenna, 4 dBi, IP66
ANT-GPS-CSM-03-3m	Passive GPS antenna, 3 dBi, 1572 MHz

Wireless Antenna Cables

A-CRF-SMSF-R3-100	Cellular magnetic base, SMA connector, 1 m
CRF-SMA(M)/N(M)-300	N-type (male) to SMA (male) CFD200 cable, 3 m

Mounting Kits

WK-51-01	Wall mounting kit with 2 plates (51.6 x 67 x 2 mm) and 6 screws
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