

OnCell G3470A-LTE Series

Industrial LTE cellular gateway



- > LTE 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)
- > Built-in high speed 4-port Ethernet switch
- > Industrial design with dual-power input and built-in DI/DO support
- > Cellular link redundancy with dual-SIM GuaranLink support
- > Antenna and power isolation design to protect against interference



Introduction

Moxa's OnCell G3470A-LTE LTE Ethernet IP gateway 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 input 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

Standards: GSM/GPRS/EDGE/UMTS/HSPA/LTE

Band Options:

EU Band:

- LTE 2100/1800/2600/900/800 MHz (B1/B3/B7/B8/B20)
- UMTS/HSPA 2100/1900/850/800/900 MHz

US Band:

- LTE 1900/AWS/850/700/700/1900 MHz (B2/B4/B5/B13/B17/B25)
- UMTS/HSPA 2100/1900/AWS/850/900 MHz
- Universal quad-band GSM/GPRS/EDGE 850/900/1800/1900 MHz

LTE Data Rate:

- 20 MHz bandwidth: 100 Mbps DL, 50 Mbps UL
- 10 MHz bandwidth: 50 Mbps DL, 25 Mbps UL

HSPA Data Rate: 42 Mbps DL, 5.76 Mbps UL (Category 24, 6)

EDGE Data Rate: 237 kbps DL, 237 kbps UL (Class 10, 12)

GPRS Data Rate: 85.6 kbps DL, 42.8 kbps UL

LAN Interface

Number of Ports: 4

Ethernet: 10/100/1000 Mbps, RJ45 connector, auto MDI/MDIX

Interface

Cellular Antenna Connectors: 2, SMA (female)

GNSS: 1 SMA (female), GPS (1575.42 MHz), GLONASS (1602 MHz)

Console Port: RS-232 (RJ45)

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

Ground Screw: M5

Reset Button: Power Reset/Factory Default Reset

I/O Interface

Alarm Contact: 1 relay output with current carrying capacity of 1 A @ 24 VDC

Digital Inputs: 2 electrically isolated inputs

• +13 to +30 V for state "1"

• +3 to -30 V for state "0"

Software

Network Protocols: ICMP, DDNS, TCP/IP, UDP, DHCP, Telnet, DNS, SNMP, HTTP, HTTPS, SMTP, SNMP, ARP

Routing/Firewall: NAT, VPN tunneling, port forwarding, IP/MAC/Port filtering, Access IP lists

VPN:

• Max. Tunnel Number: 5 (Responder/Initiator)

• IPSec (DES, 3DES, AES, MD5, SHA-1, DH2, DH5), PSK/X.509/RSA

Cellular Connectivity: GuaranLink

GPS: NMEA

Management Software

Utilities: Wireless Search Utility

Configuration and Management Options: SNMP v1/v2c/v3, Web / Telnet / Serial Console, SSH, Remote SMS Control

Private IP Solution: OnCell Central Manager

SIM Interface

Number of SIMs: 2
SIM Control: 3 V

Physical Characteristics

Housing: Aluminum, providing IP30 protection
Weight: 1300 g (2.87 lb)
Dimensions: 66.3 x 124 x 90 mm (2.61 x 4.88 x 3.54 in)

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: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Number of Power Inputs: 2 (terminal block), redundant dual inputs
Input Voltage: 12 to 48 VDC
Input Current: 0.7 A @ 12 VDC; 0.2 A @ 48 VDC
Reverse Polarity Protection: Present

Standards and Certifications

Safety: OnCell G3470A-LTE-US: UL 60950-1
EMC: OnCell G3470A-LTE-EU: EN 61000-6-2/6-4
EMI: OnCell G3470A-LTE-US: 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

Radio:

FCC ID N7NMC7355
 EN 301 489-1, EN 301 489-7, EN 301 511

MTBF (mean time between failures)

Time: 327,326 hrs

Standard: Telcordia SR332

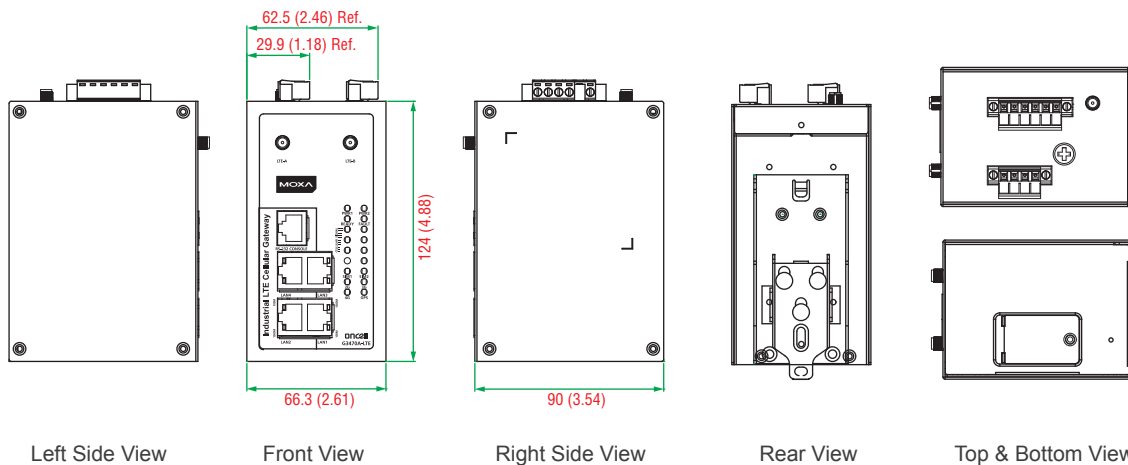
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models

OnCell G3470-LTE-US: Industrial LTE cellular gateway, B2/B4/B5/B13/B17/B25, -30 to 55°C operating temperature

OnCell G3470-LTE-US-T: Industrial LTE cellular gateway, B2/B4/B5/B13/B17/B25, -30 to 70°C operating temperature

OnCell G3470-LTE-EU: Industrial LTE cellular gateway, B1/B3/B7/B8/B20, -30 to 55°C operating temperature

OnCell G3470-LTE-EU-T: Industrial LTE cellular gateway, B1/B3/B7/B8/B20, -30 to 70°C operating temperature

Note: Please visit Moxa's website for a complete list of optional wireless accessories and antennas available for Moxa's wireless products.

Package Checklist

- OnCell G3470A-LTE
- 2 UMTS/LTE cellular antennas
- 5 plastic RJ45 protective caps for serial console and Ethernet ports
- 1 GPS connector terminator
- DIN-rail kit
- Quick installation guide (printed)
- Warranty card



Model Name	A-CRF-SMSF-R3-100	ANT-LTEUS-ASM-01	ANT-LTE-ASM-02	ANT-GPS-OSM-05-3M
Description	Magnetic Mount Antenna Base: SMA, 1 m	US LTE Antenna, 1 dBi, 2 pcs	EU LTE Antenna, 2 dBi, 2 pcs	GPS Antenna, SMA, 1 m