

OnCell G3470A-LTE Series

Preliminary

Industrial LTE cellular gateway



- > LTE Band Support
 - EU Model: 2100/1800/2600/900/800 MHz (B1/B3/B7/B8/B20)
 - US Model: 1900/AWS/850/700/1900 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
- > Dual SIM with GuaranLink support
- > Antenna and power isolation design for higher device protection against interference



Introduction

The OnCell G3470A-LTE is Moxa's LTE/Ethernet IP gateway that provides a higher cellular bandwidth and more reliable connection to your Ethernet network for cellular applications. With the 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 features isolation design 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 an uninterrupted connectivity in your applications.

Multi-Band Support

- EU Model: 2100/1800/2600/900/800 MHz (B1/B3/B7/B8/B20)
- US Model: 1900/AWS/850/700/1900 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:

OnCell G3470A-LTE-EU:

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

OnCell G3470A-LTE-US:

- LTE 1900/AWS/850/700/1900 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:

- Downlink: 100 Mbps (20 MHz bandwidth), 50 Mbps (10 MHz bandwidth)
- Uplink: 50 Mbps (20 MHz bandwidth), 25 Mbps (10 MHz bandwidth)

HSPA Data Rate:

- Downlink: Up to 42 Mbps (category 24)
- Uplink: Up to 5.76 Mbps (category 6)

GPRS/EDGE Data Rate: 236 kbps Downlink/Uplink (Class 10/12)

LAN Interface

Number of Ports: 4

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

Interface

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

Console Port: RS-232 (RJ45)

Cellular Antenna Connectors: 2 SMA (female)

Digital Inputs:

2 electrically isolated inputs
+13 to +30 V for state "1"
+3 to -30 V for state "0"

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

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

Ground Screw: M5

Reset Button: Power Reset/Factory Default Reset

Software

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

Routing/Firewall: NAT, Port Forwarding, IP/MAC/Port Filtering

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

Others: DDNS

Management Software

Utilities: OnCell Search Utility
Configuration and Management Options: Remote SMS Control, SNMPv1/v2c/v3, Web/Telnet/Serial Console
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
Installation: DIN-rail (default) or wall-mount (optional)
Dimensions: 67 x 90.5 x 124 mm (2.6 x 3.52 x 4.83 inch)

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% (30°C, non-condensing)

Power Requirements

Connector: 4-pin removable terminal block
Input Voltage: 12 to 48 VDC, redundant dual inputs
Power Consumption: 9.6W (12V/0.7A to 48V/0.2A)
Reverse Polarity Protection: Present

Standards and Certifications

Safety: OnCell G3470A-LTE-US: UL 60950-1
EMC:
 OnCell G3470A-LTE-US: FCC Part 15 Subpart B
 OnCell G3470A-LTE-EU: EN 61000-6-2/-4
Radio:
 OnCell G3470A-LTE-US: FCC ID N7NMC7355
 OnCell G3470A-LTE-EU: EN 301 489-1, EN 301 489-7, EN 301 511/4

Reliability

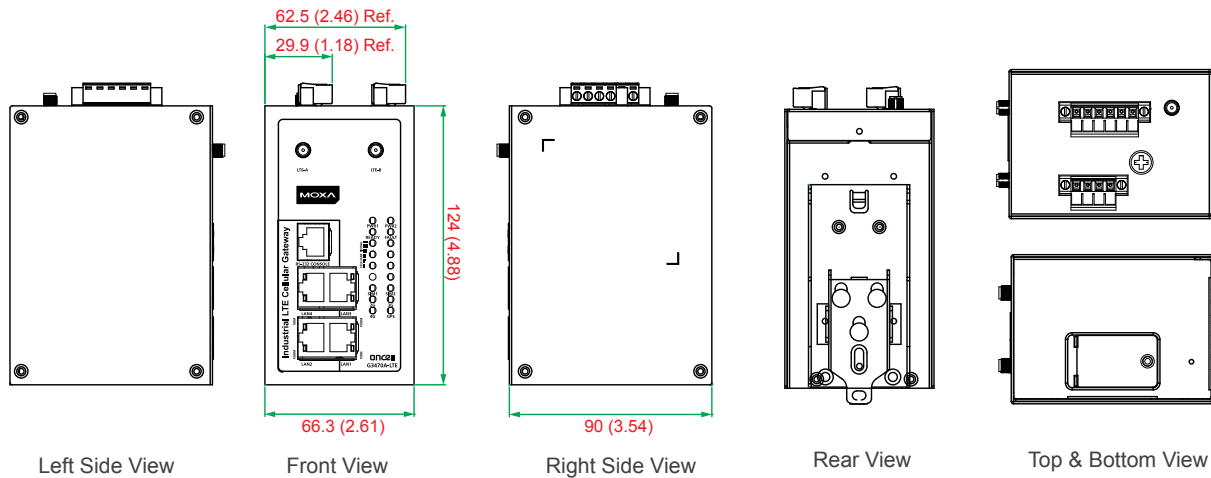
MTBF (mean time between failures): 327,326 hrs

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, operating temperature -30 to 55°C

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

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

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

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 cellular gateway
- 2 2G/3G/4G omni-directional antennas, 2 dBi, SMA (male)
- 5 plastic RJ45 protective caps for serial console and Ethernet ports
- Quick installation guide
- 1 GPS connector terminator
- Warranty card