

# 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/850/700/1900 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

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 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 uninterrupted connectivity for your applications.

### 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

#### 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

#### Interface

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

**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"

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

**Ground Screw:** M5

**Reset Button:** Power Reset/Factory Default Reset

**Console Port:** RS-232 (RJ45)

**Cellular Antenna Connectors:** 2 SMA (female)

#### 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

**Input Voltage:** 12 to 48 VDC, redundant dual inputs

**Connector:** 4-pin removable terminal block

**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

### Reliability

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

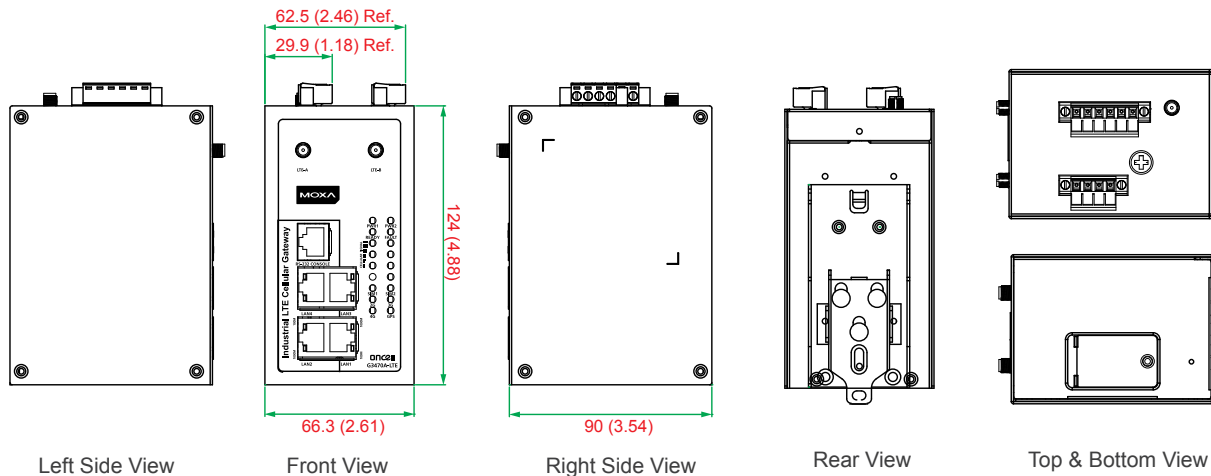
### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://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