

# 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, SNTP, 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

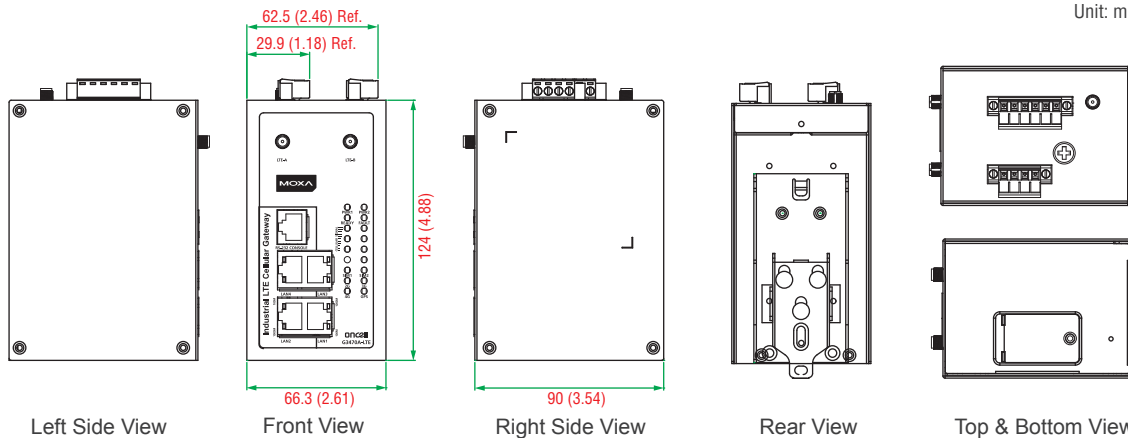
### Warranty

**Warranty Period:** 5 years

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

### Optional Accessories (can be purchased separately)

**A-CRF-SMSF-R3-100:** 1 m cellular RF cable with SMA connector and magnetic base

**ANT-LTEUS-ASM-01:** 2 x UMTS/LTE cellular antennas (US model)

**ANT-LTE-ASM-02:** 2 x UMTS/LTE cellular antennas (EU model)

### 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