OnCell G3470A-LTE Series

Industrial LTE 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		
GPS Interface			
GPS Antenna Connector	1 SMA female, GPS (1575.42 MHz), GLONASS (1602 MHz)		
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)		



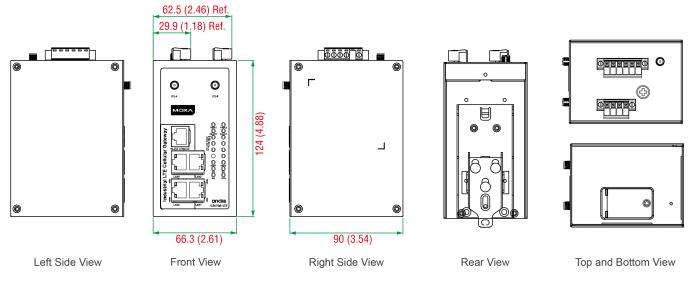
Weight	1,300 g (2.87 lb)		
Installation	DIN-rail mounting		
Environmental Limits			
Operating Temperature	Standard Models: -30 to 55°C (-22 to 131°F) Wide Temp. Models: -30 to 70°C (-22 to 158°F)		
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)		
Ambient Relative Humidity	5 to 95% (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. 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-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
Antennas	
ANT-LTEUS-ASM-01	GSM/GPRS/EDGE/UMTS/HSPA/LTE, omni-directional rubber duck antenna, 1 dBi
Wireless Antenna Cable	
A-CRF-SMSF-R3-100	Cellular magnetic-base SMA connector with 1-meter RF cable

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