

OnCell G4302-LTE4 系列

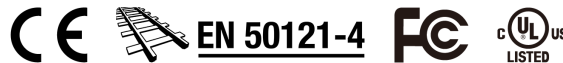
2 埠工業用 LTE Cat.4 安全行動通訊路由器



特色與優點

- 整合式 LTE Cat.4 模組，支援 US/EU/APAC 頻帶
- 電源管理支援喚醒時間排程
- 具雙 SIM 卡 GuaranLink 支援的行動通訊連結備援
- 支援行動通訊和乙太網路之間的 WAN 備援
- 適用位置為本應用的精確 GNSS
- 堅固輕巧設計，適用於惡劣環境
- 精巧尺寸和智慧 LED 設計，更易於安裝和故障排除
- 根據 IEC 62443-4-2 開發，具有安全啟動功能
- 透過 MXsecurity 管理軟體視覺化 OT 安全

認證



簡介

OnCell G4302-LTE4 系列為一款可靠強大的安全行動通訊路由器，支援全球 LTE 覆蓋範圍。此路由器提供從串列和乙太網路到行動通訊介面的可靠資料傳輸，可輕鬆整合到傳統和現代應用程式。行動通訊和乙太網路介面之間的 WAN 備援確保最大限度地縮短停機時間，同時也提供了額外的靈活性。為強化行動通訊連接的可靠性和可用性，OnCell G4302-LTE4 系列支援 GuaranLink 功能（包含雙 SIM 卡）。此外，OnCell G4302-LTE4 系列具有雙電源輸入、高階 EMS 和寬範圍操作溫度，可布署於嚴苛環境。透過電源管理功能，管理人員可設定排程，全面控制 OnCell G4302-LTE4 系列的電量使用狀況，並將待機電量降至最低消耗以節省成本。

OnCell G4302-LTE4 系列專為高安全性設計，支援確保系統完整性的安全啟動、用於管理網路存取和流量過濾的多層防火牆策略，以及用於安全遠端通訊的 VPN。OnCell G4302-LTE4 系列符合國際公認的 IEC 62443-4-2 標準，可輕鬆地將這些安全行動通訊路由器整合至 OT 網路安全系統。

高整合工業用行動通訊路由器

- 支援美國、澳洲、歐洲、亞洲和日本等全球行動通訊頻段
- 2 Gigabit 連接埠，具有託管 Layer 2 轉換功能
- 支援 RS232/422/485 三合一串列裝置
- 支援用於分散式系統和本地站點管理的 MXsecurity 和 MXview One

使用先進的網路安全功能防禦惡意威脅

- 安全啟動可確保系統完整性並預防篡改攻擊
- VPN 功能可確保安全加密的資料通信
- 防火牆策略可防禦內部網路免受未經授權的存取和 DoS 攻擊
- 網路位址轉譯 (Network Address Translation, NAT) 在可信和非可信網路間提供 IP 隱私
- 符合 IEC 62443-4-2 的網路安全功能

工業級可靠性

- 電源備援的雙電源輸入
- GuaranLink 和雙 SIM 卡支援，確保可靠的行動通訊連接
- -30 至 70°C 寬範圍操作溫度
- 堅固耐用的硬體設計，適用於危險場所和各種工業應用

規格

Cellular Interface

Cellular Standards	LTE CAT 4, HSPA, UMTS, EDGE, GPRS, GSM
LTE Data Rate	20 MHz bandwidth: 150 Mbps DL, 50 Mbps UL
Band Options (EU)	-EU(-T) models: LTE B1 (2100 MHz) / B3 (1800 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz) / B28 (700 MHz) UMTS/HSPA B1 (2100 MHz) / B8 (900 MHz) GSM/GPRS/EDGE 900 MHz / 1800 MHz
Band Options (AU)	-AU(-T) models: LTE B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B28 (700 MHz) UMTS/HSPA B1 (2100 MHz) / B5 (850 MHz) / B8 (900 MHz) GSM/GPRS/EDGE 900 MHz / 1800 MHz
Band Options (US)	-US(-T) models: LTE B2 (1900 MHz) / B4 (1700/2100 MHz (AWS)) / B5 (850 MHz) / B12 (700 MHz) / B13 (700 MHz) / B14 (700 MHz) / B66 (1700 MHz) / B25 (1900 MHz) / B26 (850 MHz) / B71 (600 MHz) UMTS/HSPA B2 (1900 MHz) / B4 (1700 MHz (AWS)) / B5 (850 MHz)
Band Options (JP)	-JP(-T) models: LTE B1 (2100 MHz) / B3 (1800 MHz) / B8 (900 MHz) / B11 (1500 MHz) / B18 (800 MHz) / B19 (800 MHz) / B21 (1500 MHz) UMTS/HSPA B1 (2100 MHz) / B19 (800 MHz)
No. of SIMs	2 Push-eject tray type
SIM Format	Nano SIM
Cellular Antenna Connectors	2 SMA female

Ethernet Interface

10/100/1000BaseT(X) Ports (RJ45 connector)	2
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GNSS Interface

GNSS Bands	GPS (1575.42 MHz) GLONASS (1597.52 MHz) Galileo (1575.42 MHz) BeiDou (1561.098 MHz)
GNSS Antenna Connectors	1 SMA female

Input/Output Interface

Alarm Contact Channels	1 Relay output with current carrying capacity of 1 A @ 24 VDC
Analog Input Channels	1
Digital Inputs	-30 to +3 V for state 0 +13 to +30 V for state 1
Buttons	Reset button

USB Interface

No. of USB Ports	1
USB Connector	USB Type A
USB Standards	USB 2.0

Serial Interface

No. of Ports	1
Connector	DB9 male
Serial Standards	RS-232/422/485
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None Even Odd
Baudrate	300 bps to 921.6 kbps
Console Port	RS-232 (TxD, RxD, GND), USB type-C (115200, n, 8, 1)

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND

Operation Modes

Standards	Real COM mode RFC2217 mode TCP Client mode TCP Server mode UDP mode
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LED Interface

LED Indicators	PWR1, PWR2, STATE, USB, SIM1, SIM2, CELL, LTE, GNSS, SERIAL, VPN
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Ethernet Software Features

Management	GuaranLink Power Management Back Pressure Flow Control LLDP Syslog Wireless Search Utility MXview One MXconfig MXsecurity MRC Quick Link ¹
Broadcast Forwarding	IP directed broadcast, broadcast forwarding
Configuration Options	Serial Console Web Console (HTTP/HTTPS) Command Line Interface (CLI) through Serial/Telnet/SSH
Network Protocols	DDNS DHCP Server/Client SMTP SNMPv1/v2c/v3 ARP Telnet TCP/IP UDP Remote SMS Control

1. 將於 2023 年第四季推出。

Filter	802.1Q VLAN Port-based VLAN
Unicast Routing	Static Route
Multicast Routing	Static Route
Routing Redundancy	VRRP
Time Management	NTP Server/Client SNTP

Security Functions

Hardware-based Security	Secure Boot
Password	User-level password protection
Authentication	Local database RADIUS Access Control List

Firewall

Filter	DDoS Ethernet protocols ICMP IP address MAC address Ports
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NAT

Features	1-to-1 N-to-1 PAT NAT loopback Double NAT
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IPsec VPN

Authentication	MD5 and SHA (SHA-256) RSA (key size: 1024-bit, 2048-bit) Pre-shared Key or X.509 v3 certificate
Encryption	DES 3DES AES-128 AES-192 AES-256
Concurrent VPN Tunnels	Max. 15 IPsec VPN tunnels
Protocols	IPsec

Power Parameters

Input Current	0.96 A @ 12 VDC (max.) 0.63 A @ 12 VDC (average) 0.33 A @ 24 VDC (average) 0.18 A @ 48 VDC (average)
Input Voltage	12 to 48 VDC
Power Consumption	7.6 W (typ.) 11.52 W (max.)
Power Connector	Screw-locked terminal block
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal IP40 ²
Dimensions	125 x 46.2 x 100 mm (4.92 x 1.82 x 3.94 in)
Weight	610 g (1.34 lb)
Installation	DIN-rail mounting Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard Models: -10 to 55°C (14 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

EMC	EN 55032/35 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: 2 kV IEC 61000-4-5 Surge: Power: 2 kV, Signal: 2 kV IEC 61000-4-6 CS: 10 V; 150 kHz to 80 MHz IEC 61000-4-8: 30 A/m
Freefall	IEC 60068-2-32
Hazardous Locations	CCCEX ³ IECEX ³ ATEX ³ Class I Division 2 ³
Railway	EN 50121-4
Traffic Control	NEMA TS2 ³
Road Vehicles	E mark E1 ³
Radio Frequency	FCC PTCRB EN 303 413
Radio	NCC ³ TELEC RCM KC ICID UKCA Anatel ³
Carrier Approvals	Verizon ³ AT&T ³
Cellular Standards	EN 301 489-1/-19 EN 301 489-1/-52 EN 301511 EN 301908-1/-2/-13

2. 具關閉的 SIM 插槽橡膠蓋。
3. 將於 2023 年第四季推出。

Safety	UL 62368-1 EN 62368-1
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6

MTBF

Time	-AU(-T) models: 518,722 hrs -EU(-T) models: 518,722 hrs -JP(-T) models: 522,186 hrs -US(-T) models: 521,746 hrs
Standards	Telcordia SR332

Warranty

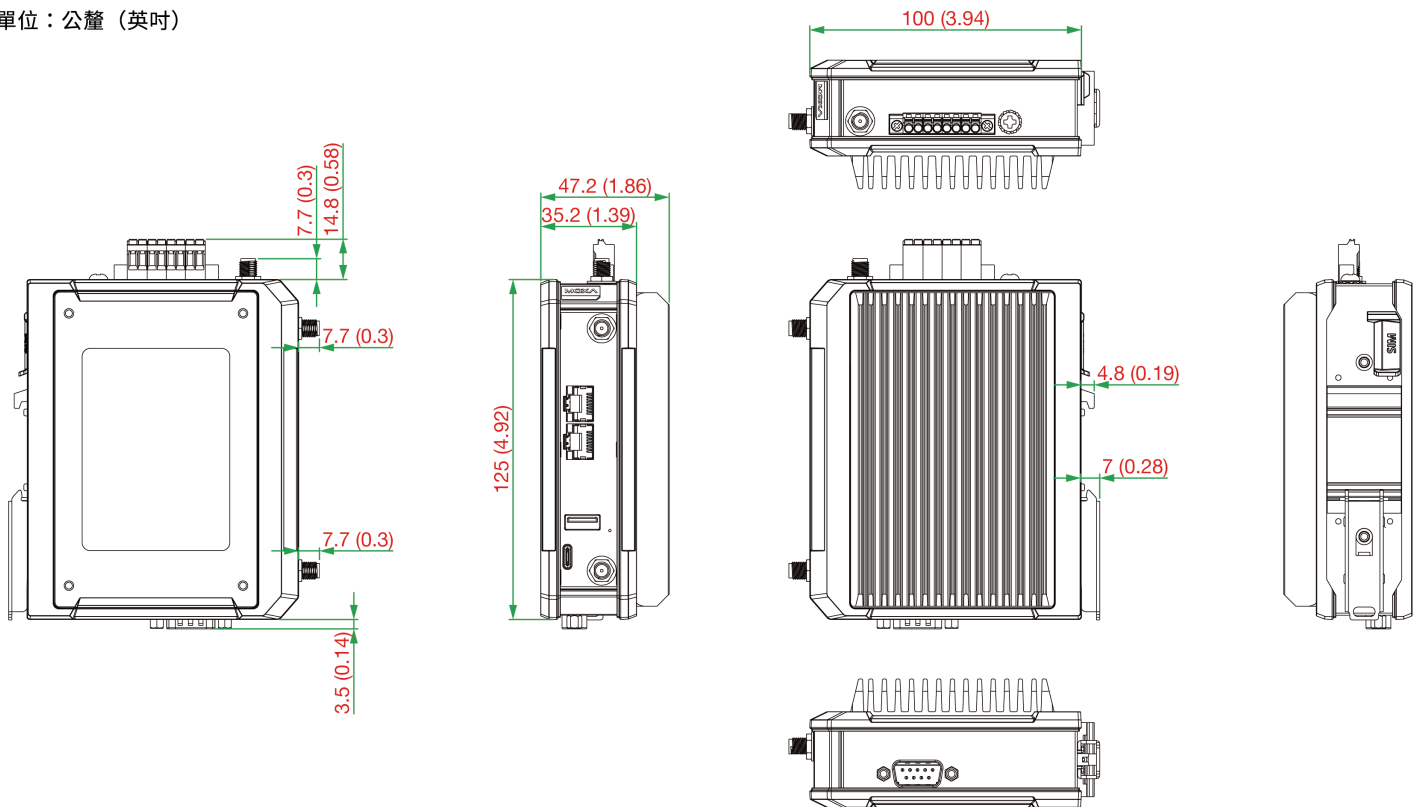
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x OnCell G4302-LTE4 Series secure cellular router
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	LTE Band	Operating Temp.
OnCell G4302-LTE4-EU	B1 (2100 MHz) / B3 (1800 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz) / B28 (700 MHz)	-10 to 55°C
OnCell G4302-LTE4-EU-T	B1 (2100 MHz) / B3 (1800 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz) / B28 (700 MHz)	-30 to 70°C

Model Name	LTE Band	Operating Temp.
OnCell G4302-LTE4-AU	B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B28 (700 MHz)	-10 to 55°C
OnCell G4302-LTE4-AU-T	B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B28 (700 MHz)	-30 to 70°C
OnCell G4302-LTE4-US	B2 (1900 MHz) / B4 (1700/2100 MHz (AWS)) / B5 (850 MHz) / B12 (700 MHz) / B13 (700 MHz) / B14 (700 MHz) / B66 (1700 MHz) / B25 (1900 MHz) / B26 (850 MHz) / B71 (600 MHz)	-10 to 55°C
OnCell G4302-LTE4-US-T	B2 (1900 MHz) / B4 (1700/2100 MHz (AWS)) / B5 (850 MHz) / B12 (700 MHz) / B13 (700 MHz) / B14 (700 MHz) / B66 (1700 MHz) / B25 (1900 MHz) / B26 (850 MHz) / B71 (600 MHz)	-30 to 70°C
OnCell G4302-LTE4-JP	B1 (2100 MHz) / B3 (1800 MHz) / B8 (900 MHz) / B11 (1500 MHz) / B18 (800 MHz) / B19 (800 MHz) / B21 (1500 MHz)	-10 to 55°C
OnCell G4302-LTE4-JP-T	B1 (2100 MHz) / B3 (1800 MHz) / B8 (900 MHz) / B11 (1500 MHz) / B18 (800 MHz) / B19 (800 MHz) / B21 (1500 MHz)	-30 to 70°C

配件 (選購)

Antennas

ANT-5G-ASM-03	3 dBi GSM/UMTS/LTE/5G NR dipole antenna with SMA (male) connector
MAT-5G-PA-SM-2-06-3m	6 dBi MIMO panel antenna with 2 SMA (male) connectors for cellular applications, 3 m cable
MAT-5G-PA-SM-3-06-3m	6 dBi MIMO panel antenna with 3 SMA (male) connectors for cellular and GNSS applications, 3 m cable
ANT-GNSS-CSM-02-3m	2 dBic GNSS antenna with SMA (male) connector, 3 m cable

Wireless Antenna Cables

A-CRF-SMSF-R3-100	Wireless antenna cable with SMA (male) to SMA (female) connectors, magnetic base, RG-174 type, 1 m
A-CRF-SMSF-L1-300	Wireless antenna cable with SMA (male) to SMA (female) connectors, magnetic base, LMR195 type, 3 m
A-CRF-SMSF-C2-300	Wireless antenna cable with SMA (male) to SMA (female) connectors, CFD-200 type, 3 m
A-CRF-SMSF-C2-500	Wireless antenna cable with SMA (male) to SMA (female) connectors, CFD-200 type, 5 m

Mounting Kits

WK-41-01	Wall-mounting kit with 1 plate (41 x 144 x 7.5 mm)
WK-160-01	Wall-mounting kit with 1 plate (160 x 89 x 2.0 mm), 4 screws, black

Software

LIC-MXviewOne-NEW-XN-SR	MXview One node license with customizable node quantity (minimum 1 node)
LIC-MXsecurity-NEW-1Y-XN-SR	1-year MXsecurity license with customizable node quantity (minimum 1 node)

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