

OnCell 3120-LTE-1 系列

工業 LTE Cat.1 蜂巢式閘道器



特色與優點

- 雙 SIM 卡故障切換與自動連線恢復，提供可靠的行動網路連線
- 透過乙太網路連接舊式 RS-232/422/485 串列裝置
- 透過 Moxa Remote Connect (MRC) 實現集中化監控與遠端存取
- 低功耗（待機模式下為 40 mW）

認證



簡介

OnCell 3120-LTE-1 系列為 LTE Cat.1 蜂巢式閘道器，專為多樣化環境中的可靠連線、簡易維護與快速部署所設計。這些閘道器提供穩定的串列埠/乙太網路轉行動網路連線，並透過 GuaranLink 行動網路自動恢復技術確保最佳可靠性。

透過 MRC Quick Link Ultra，操作人員可獲得對 OnCell 閘道器及其連接終端裝置的完整可見度與安全遠端控制，進而縮短故障排除時間、極小化停機時間，並實現更可靠的工業營運。

OnCell 閘道器專為邊緣應用設計，具備省電技術，可透過排程控制將待機功耗降至 40 mW 以下，使其成為電力受限之遠端應用的理想選擇。全面支援串列介面 (RS-232/422/485) 與彈性運作模式 (Real COM, Reverse Real COM, RFC 2217, TCP Server/Client, UDP)，確保與串列裝置的無縫相容性。通過 IECEx、ATEX 與 CID2 認證，亦使 OnCell 閘道器適用於石油與天然氣等危險且嚴苛的應用環境。

規格

Cellular Interface

Cellular Standards	LTE Cat. 1 HSPA UMTS EDGE GPRS GSM
Data Rate	10 MHz bandwidth: 10.2 Mbps DL, 5.2 Mbps UL
Frequency Bands Supported	-EU(-T) models: 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) / LTE Band 28A (700 MHz) UMTS/HSPA 900 MHz / 1800 MHz / 2100 MHz GSM 900 MHz / 1800 MHz -AU(-T) models: LTE Band 1 (2100 MHz) / LTE Band 3 (1800 MHz) / LTE Band 5 (850 MHz) / LTE Band 8 (900 MHz) / LTE Band 9 (1800 MHz) / LTE Band 18 (850 MHz) / LTE Band 19 (850 MHz) / LTE Band 26 (850 MHz) / LTE Band 28 (700 MHz) UMTS/HSPA 2100 MHz / 850 MHz / 800 MHz / 900 MHz -US(-T) models: LTE Band 2 (1900 MHz) / LTE Band 4 (1700MHz (AWS)) / LTE Band 5 (850 MHz) / LTE Band 12 (700 MHz) / LTE Band 13 (700 MHz) / LTE Band 14 (700 MHz) / LTE Band 66 (1700 MHz) / LTE Band 71 (600 MHz) UMTS/HSPA 1900 MHz / 1700 MHz / 850 MHz

No. of SIMs	2
SIM Format	Nano SIM
Cellular Antenna Connectors	2 x SMA female

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	2
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X)

Input/Output Interface

Buttons	Reset button
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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, Space, Mark
Baudrate	75 bps to 921.6 kbps
Console Port	RS-232 (TxD, RxD, GND), 4-pin header output (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 Reverse Real COM TCP Server mode TCP Client mode UDP mode
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LED Interface

LED Indicators	SIGNAL, SYS, LAN1, LAN2, SERIAL
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Ethernet Software Features

Management	DHCP Server DDNS Syslog Power Saving Wireless Search Utility
Network Protocols	ARP Telnet TCP/IP UDP SMTP SNMPv1/v2c/v3
Security	HTTPS
Time Management	SNTP Client
Tunneling	GRE
VPN	IPsec OpenVPN

Wireless Software Features

Management	GuaranLink Send SMS SMS Remote Control Moxa Remote Connect (MRC)
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Firewall

Filter	MAC address Ports IP address
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NAT

Features	NAT loopback Port forwarding
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IPsec VPN

Authentication	PSK/X.509/RSA
Encryption	DES, 3DES, AES, MD5, SHA-1, DH2, DH5
Concurrent VPN Tunnels	5

OpenVPN

OpenVPN	OpenVPN (client and server), Tunnel mode (routing) and TAP mode (bridge)
Encryption	Blowfish CBC, DES CBC, DES-EDE3 CBC, AES-128/192/256 CBC
Concurrent VPN Tunnels	5

Power Parameters

Input Current	0.8 A (max.)
Input Voltage	9 to 36 VDC
Power Consumption	5 W (typ.)
Power Connector	Terminal block
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	128.5 x 26 x 89.1 mm (5.06 x 1.02 x 3.51 in)
Weight	550 g (1.22 lb)
Installation	DIN-rail mounting Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard models: 0 to 55°C (32 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 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 1 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 kHz to 150 MHz; Signal: 80 V IEC 61000-4-8: 30 A/m
Freefall	IEC 60068-2-32
Hazardous Locations	ATEX IECEx Class I Division 2
Radio Frequency	PTCRB FCC ID SLE-LE910CXNF
Radio	NCC: CCAF224G0100T1 KC: R-C-MXA-OnCell-3120 RCM TELEC JATE
Carrier Approvals	Verizon AT&T
Cellular Standards	EN 301 511 EN 301 908-1 EN 62311(MPE SAR) AS/CA S042 EN 301489-1/-52
Cybersecurity	EN 18031-1
Safety	IEC 60950-1 IEC 62368-1 UL 60950-1 UL 62368-1
Shock	IEC 60068-2-27

Vibration	IEC 60068-2-6
Green Product	RoHS, CRoHS, WEEE

MTBF

Time	585,775 hrs
Standards	Telcordia Standard SR-332

Warranty

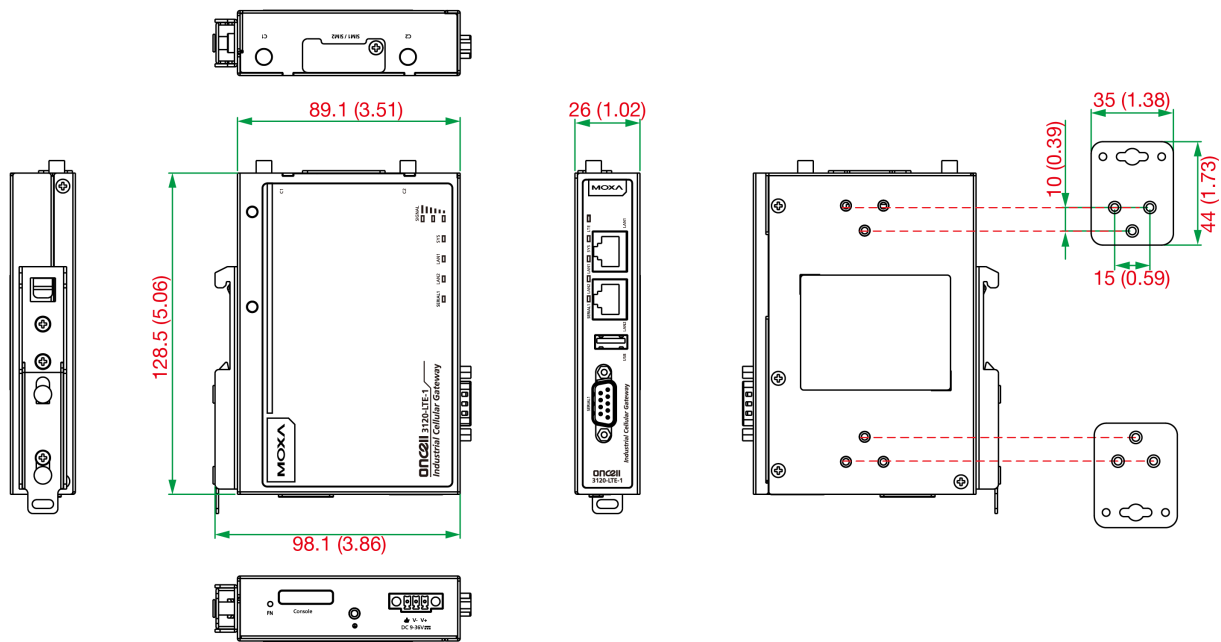
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x OnCell 3120-LTE-1 Series LTE cellular gateway
Installation Kit	1 x DIN-rail kit
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	Cellular Standard	LTE Band	Operating Temp.	Mounting
OnCell 3120-LTE-1-EU	LTE Cat 1	B1 (2100 MHz) / B3 (1800 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz) / B28A (700 MHz)	-0 to 55°C	Wall, DIN rail
OnCell 3120-LTE-1-EU-T	LTE Cat 1	B1 (2100 MHz) / B3 (1800 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz) / B28A (700 MHz)	-30 to 70°C	Wall, DIN rail
OnCell 3120-LTE-1-AU	LTE Cat 1	B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B8 (900 MHz) / B9 (1800 MHz) / B18 (850 MHz) / B19 (850 MHz)	-0 to 55°C	Wall, DIN rail

Model Name	Cellular Standard	LTE Band	Operating Temp.	Mounting
		MHz) / B26 (850 MHz) / B28 (700 MHz)		
OnCell 3120-LTE-1-AU-T	LTE Cat 1	B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B8 (900 MHz) / B9 (1800 MHz) / B18 (850 MHz) / B19 (850 MHz) / B26 (850 MHz) / B28 (700 MHz)	-30 to 70°C	Wall, DIN rail
OnCell 3120-LTE-1-US	LTE Cat 1	B2 (1900 MHz) / B4 (1700 MHz) / B5 (850 MHz) / B12 (700 MHz) / B13 (700 MHz) / B14 (700 MHz) / B66 (1700 MHz) / B71 (600 MHz)	-0 to 55°C	Wall, DIN rail
OnCell 3120-LTE-1-US-T	LTE Cat 1	B2 (1900 MHz) / B4 (1700 MHz) / B5 (850 MHz) / B12 (700 MHz) / B13 (700 MHz) / B14 (700 MHz) / B66 (1700 MHz) / B71 (600 MHz)	-30 to 70°C	Wall, DIN rail

配件 (選購)

Antennas

ANT-LTEUS-ASM-01	GSM/GPRS/EDGE/UMTS/HSPA/LTE, 1 dBi, omnidirectional rubber-duck antenna
ANT-LTE-ASM-02	GPRS/EDGE/UMTS/HSPA/LTE, 2 dBi, omnidirectional rubber-duck antenna

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
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Mounting Kits

WK-35-04	Wall-mount kit with 2 plates (35 x 44 x 2.5 mm), 6 screws (FTS x 6 M3 x 4 mm)
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Software

LIC-MRCQL-ADD-1Y-XN-SR	1-year MRC Quick Link add-on license with customizable node quantity (minimum 1 node)
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