

OnCell G3101/G3201 Series

Compact quad-band GSM/GPRS IP gateways



Features and Benefits

- Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- Desktop or DIN-rail installation
- Connect Ethernet and serial devices
- Centralized private IP management software with OnCell Central Manager
- Choice of configuration methods, including web console, serial console, and Telnet

Certifications



Introduction

The OnCell G3111/G3151/G3211/G3251 are cellular IP gateways that can conveniently and transparently connect up to two devices to a cellular network, allowing you to connect serial devices to your existing Ethernet with only basic configuration. To ensure zero data loss and on-demand cellular communication, OnCell devices are integrated with the GuaranLink function.

The G3111/G3151/G3211/G3251 cellular IP gateways are compact, and can be placed on a desk or mounted on a DIN rail. The products come with a 12 to 48 VDC power input and have 2 kV EFT/surge protection to allow the use of different types of field power sources. The serial ports are also protected by 15 kV ESD line protection to keep your system safe from unexpected electrical discharges.

Specifications

Cellular Interface

Cellular Standards	GSM, GPRS
Band Options	Quad-band GSM/GPRS 850 MHz / 900 MHz / 1800 MHz / 1900 MHz
GPRS Data Rates	85.6 kbps DL, 43 kbps UL
GPRS Multi-Slot Class	10
GPRS Terminal Device Class	Class B
GPRS Coding Schemes	CS1 to CS4
Cellular Antenna Connectors	1 SMA female
No. of SIMs	1
SIM Control Voltage	3 V

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	1
Total Port Count	1

Ethernet Software Features

Management	ARP, DDNS, DHCP/BOOTP, DNS Relay, HTTP, SMTP, SNMPv1/v2c/v3, TCP/IP, Telnet, UDP, Web Console, Wireless Search Utility, Serial Console, Telnet Console, Remote SMS Control, OnCell Central Manager, GuaranLink
Routing	NAT, Port forwarding, WAN IP Filtering
Security	HTTPS/SSL, SSH
Time Management	SNTP

Firewall

Filter	ICMP
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Serial Interface

Serial Standards	OnCell G3211/G3111: RS-232 OnCell G3151/G3251: RS-232/422/485
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	RTS/CTS, XON/XOFF
Baudrate	50 bps to 921.6 kbps

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	Ethernet Modem mode Real COM mode RFC2217 mode TCP Client mode TCP Server mode UDP mode SMS Tunnel Reverse Real COM
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Power Parameters

Input Voltage	12 to 48 VDC
Power Connector	Power jack
Input Current	0.9 A @ 12 VDC, 0.23 A @ 48 VDC

Physical Characteristics

Housing	Aluminum
IP Rating	IP30
Dimensions	77 x 111 x 26 mm (3.03 x 4.37 x 1.02 in)
Weight	OnCell G3151/G3111: 170 g (0.38 lb) OnCell G3211/G3251: 190 g (0.42 lb)

Environmental Limits

Operating Temperature	-30 to 55°C (-22 to 131°F)
Storage Temperature (package included)	-40 to 75°C (-40 to 167°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

Safety	UL 60950-1
EMC	EN 55032/24
EMI	CISPR 32, 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: 4 kV; Signal: 2 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 Part 22H, FCC Part 24E, EN 301 489-1, EN 301 489-7, EN 301 511, PTCRB (OnCell G3151 only)

MTBF

Time	OnCell G3111: 664,000 hrs OnCell G3151: 661,000 hrs OnCell G3211: 647,000 hrs OnCell G3251: 642,000 hrs
Standards	Telcordia SR332

Warranty

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

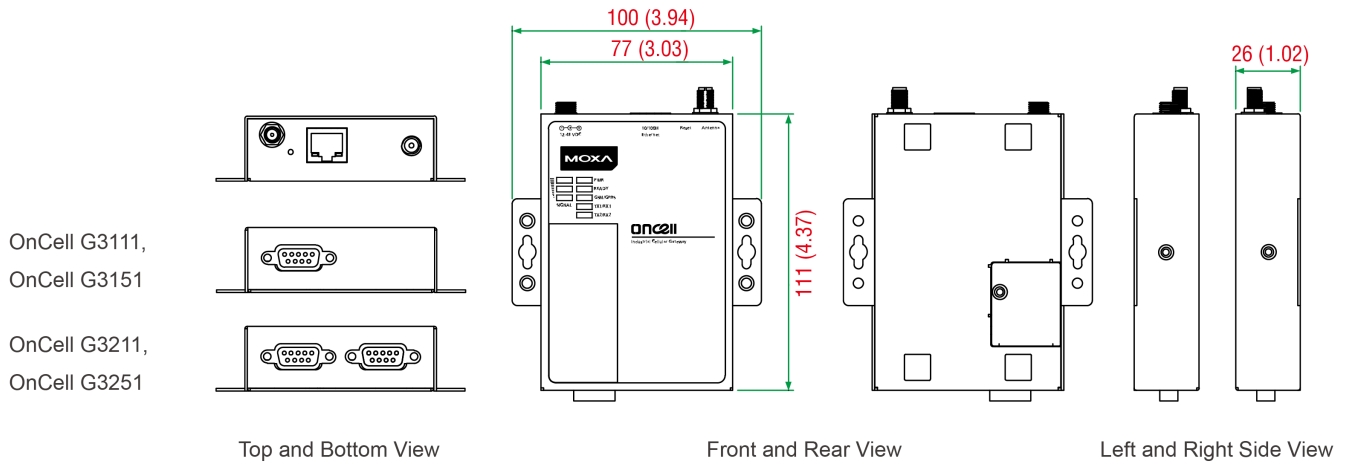
Package Contents

Device	1 x OnCell G3101/G3201 Series IP gateway ¹
Installation Kit	1 x DIN-rail kit 1 x rubber stand
Antenna	1 x GSM/GPRS
Power Supply	DC power supply (screw-on type)
Documentation	1 x quick installation guide 1 x warranty card

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	GPRS Band	Operating Temp.	No. of Serial Ports	Serial Standards
OnCell G3111	GSM/GPRS	850/900/1800/1900 MHz	-30 to 55°C	1	RS-232
OnCell G3151	GSM/GPRS	850/900/1800/1900 MHz	-30 to 55°C	1	RS-232/422/485
OnCell G3211	GSM/GPRS	850/900/1800/1900 MHz	-30 to 55°C	2	RS-232
OnCell G3251	GSM/GPRS	850/900/1800/1900 MHz	-30 to 55°C	2	RS-232/422/485

Accessories (sold separately)

Wireless Antenna Cable

A-CRF-SMSF-R3-100

Cellular magnetic-base SMA connector with 1-meter RF cable