

# OnCell G3111/3151

## 1-port RS-232 or RS-232/422/485 cellular IP modems



- > Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, and Reverse Real COM
- > Management Software: Private IP management with OnCell Central
- > Choice of configuration methods, including web console, serial console, and Telnet
- > Desktop or DIN-Rail installation



### Overview

The OnCell G3111/G3151 are cost effective cellular IP modems that can conveniently and transparently connect devices to a cellular network, allowing you to network your existing serial devices with only basic configuration. OnCell provides versatile operation modes that make data transmission between the serial and cellular interfaces bi-directional. The G3111/G3151 cellular IP modems are compact,

and can be used on a desktop 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

**Standards:** GSM/GPRS  
**Band Options:** Quad-band 850/900 and 1800/1900 MHz  
**GPRS Multi-slot Class:** Class 10  
**GPRS Terminal Device Class:** Class B  
**GPRS Coding Schemes:** CS1 to CS4  
**Tx Power:** 1 watt GSM 1800/1900, 2 watts EGSM 850/900

**SIM Control:** 3 V

#### LAN Interface

**Number of Ports:** 1  
**Ethernet:** 10/100 Mbps, RJ45 connector, Auto MDI/MDIX  
**Magnetic Isolation Protection:** 1.5 KV built-in

#### SIM Interface

**Number of SIMs:** 1  
**SIM Control:** 3 V

#### Serial Interface

**Number of Ports:** 1  
**Serial Standards:**  
 G3111: 1 RS-232 port  
 G3151: 1 RS-232/422/485 port  
**ESD Protection:** 15 KV

**Power EFT/Surge Protection:** 2 KV

#### Serial Communication Parameters

**Data Bits:** 5, 6, 7, 8  
**Stop Bits:** 1, 1.5, 2 (when parity = None)  
**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-485-4w:** Tx+, Tx-, Rx+, Rx-, GND  
**RS-485-2w:** Data+, Data-, GND

#### Software

**Network Protocols:** ICMP, TCP/IP, UDP, DHCP, Telnet, DNS, SNMP, HTTP, HTTPS, SMTP, SNTP, ARP

**Authentication:** Local user-name and password

**Security:** Accessible IP list

**Operation Modes:** Real COM, TCP Server, TCP Client, UDP, SMS Tunnel, Reverse Real COM

**Configuration and Management Options:** SNMP MIB-II, v3, DDNS, IP Report, Web/Telnet/Serial Console, Serial Logging

**Utilities:** Provided for Windows 95/98/ME, Windows NT, Windows 2000/XP/2003/Vista/Server-2008, Windows XP/2003/Vista/Server-2008 x64

**Windows Real COM Drivers:** Windows 95/98/ME, Windows NT, Windows 2000/XP/2003/Vista/Server-2008, Windows XP/2003/Vista/Server-2008 x64

#### Management Software

**OnCell Central Manager:** Centralized management solution for accessing private IPs from the Internet

#### Physical Characteristics

**Housing:** Aluminum, providing IP30 protection  
**Weight:** 165±5 g  
**Dimensions:** 111 x 77 x 26 mm (4.37 x 3.03 x 1.02 in)

### Environmental Limits

**Operating Temperature:** -30 to 55°C (-22 to 131°F)

**Operating Humidity:** 5 to 95% RH

**Storage Temperature:** -40 to 75°C (-40 to 167°F)

### Power Requirements

**Number of Power Inputs:** 1 power jack

**Input Voltage:** 12 to 48 VDC

**Data Link:** 335 to 900 mA (peak) @ 12 V

### Regulatory Approvals

**RF:**

EN301 489-1

EN301 489-7

EN301 511

**EMC:**

CE: EN55022 Class A / EN55024

FCC: FCC part 15 subpart B, Class A

EN61000-4-2 (ESD)

EN61000-4-3 (RS)

EN61000-4-4 (EFT)

EN61000-4-5 (Surge)

EN61000-4-8

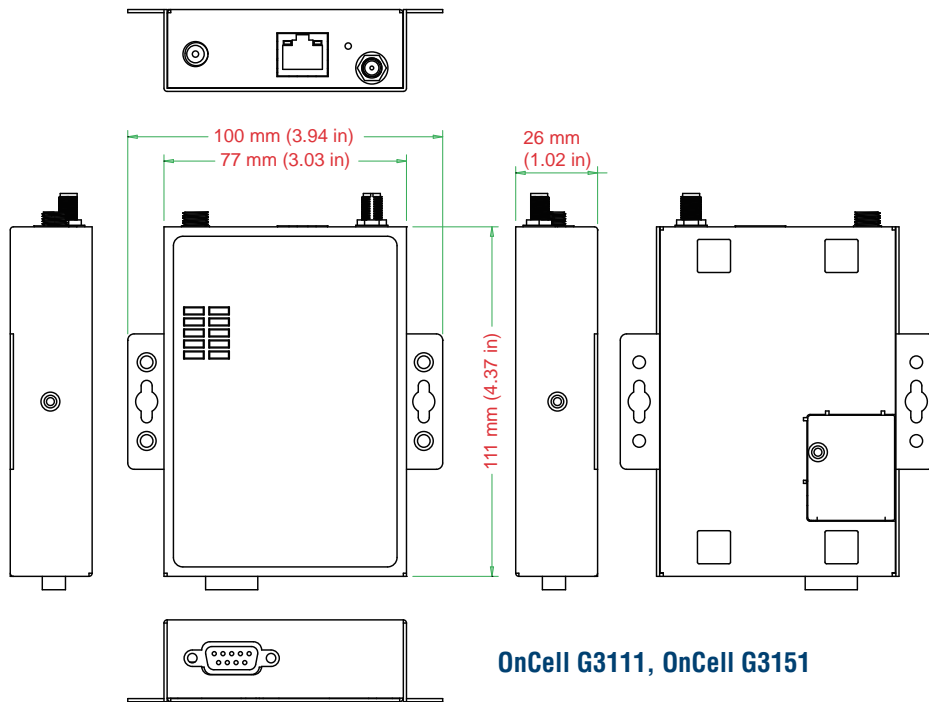
EN61000-4-12

### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Dimensions



**OnCell G3111, OnCell G3151**

### Ordering Information

#### Available Models

**OnCell G3111:** 1-port RS-232 to GSM/GPRS IP modem

**OnCell G3151:** 1-port RS-232/422/485 to GSM/GPRS IP modem

#### Optional Accessories (can be purchased separately)

**DC Power Supply (screw-on):** See Appendix A

**ANT-CQB-AHSM-00-3m:** Omni 0dBi/10cm, magnetic SMA quad-band antenna (impedance = 50 ohms), 3 m

**ANT-CQB-AHSM-03-3m:** Omni 3dBi/25cm, magnetic SMA quad-band antenna (impedance = 50 ohms), 3 m

**ANT-CQB-AHSM-05-3m:** Omni 5dBi/37cm, magnetic SMA quad-band antenna (impedance = 50 ohms), 3 m

#### Package Checklist

- OnCell IP Modem
- Rubber SMA antenna
- DC Power Supply (screw-on)
- DIN-Rail Kit
- Rubber stand
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card