

OnCell G3110/G3150-HSDPA Series

Industrial five-band GSM/GPRS/EDGE/UMTS/HSDPA high performance IP gateways with VPN



- > Tri-band UMTS/HSDPA 850/1900/2100 MHz
- > Quad-band GSM/GPRS/EDGE 850/900/1800/1900 MHz
- > Connect to Ethernet and serial devices over an integrated VPN
- > Centralize private IP management software with OnCell Central Manager
- > Redundant DC power inputs
- > 2 digital inputs and 1 relay output



Overview

The OnCell G3110/G3150-HSDPA series of high-speed industrial-grade IP gateways are intelligent and fully-featured wireless communication platforms that connect your Ethernet and serial devices over a cellular TCP/IP network. The OnCell G3110/G3150-HSDPA series offers connectivity to all tri HSDPA/UMTS frequency bands and quad GSM/GPRS/EDGE frequency bands used in Europe, the United States, and Japan, allowing seamless global roaming on the best available

network. The OnCell G3110/G3150-HSDPA come with private IP management software and support VPN for handling the IP address issue in cellular network structures. The OnCell G3110/G3150-HSDPA also have a built-in relay output that can be configured to indicate the priority of events when notifying or warning engineers in the field. Two digital inputs also allow you to connect basic I/O devices, and the OnCell G3110/G3150-HSDPA comes with redundant power inputs to assure non-stop operation.

Specifications

Cellular Interface (OnCell G3100-HSDPA series)

Standards: GSM/GPRS/EDGE/UMTS/HSDPA

Band Options:

- Tri-band UMTS/HSDPA 850/1900/2100 MHz
- Quad-band GSM/GPRS/EDGE 850/900/1800/1900 MHz

EDGE Multi-slot Class: Class 10

EDGE Terminal Device Class: Class B

GPRS Multi-slot Class: Class 10

GPRS Terminal Device Class: Class B

GPRS Coding Schemes: CS1 to CS4

Tx Power:

GSM900: 2 W

UMTS/HSDPA: 0.25 W

EDGE900: 0.5 W

EDGE1800: 0.4 W

GSM1800: 1 W

Cellular Interface (OnCell G3100-HSDPA-JPS/JPN series)

Standards: UMTS/HSDPA

Band Options:

OnCell G3100-HSDPA-JPS series: 2100 MHz

OnCell G3100-HSDPA-JPN series: 800/2100 MHz

Tx Power: UMTS/HSDPA: 0.25 W

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:

G3110: RS-232 (DB9 male connector)

G3150: RS-232 (DB9 male connector), RS-422/485 (5-pin terminal block connector)

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

I/O Interface

Alarm Contact: 1 relay output with current carrying capacity of 1 A @ 24 VDC

Digital Inputs: 2 electrically isolated inputs

- +13 to +30 V for state "1" (On)

- +3 to -30 V for state "0" (Off)

Software

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

Router/Firewall: NAT, port forwarding

Authentication: Local user-name and password

Security: Accessible IP list

Operation Modes: Real COM, Secure Real COM, Reverse Real COM, Secure Reverse Real COM, TCP Server, Secure TCP Server, TCP Client, Secure TCP Client, UDP, RFC2217, Ethernet Modem, SMS Tunnel

Configuration and Management Options: SNMP MIB-II, SNMP Private MIB, SNMPv1/v2c/v3, DDNS, IP Report, Web/Telnet/Serial-Console/SSH

Utilities: Provided for Windows 95/98/ME, Windows NT, Windows 2000/XP/2003/Vista/7/Server-2008, Windows XP/2003/Vista/7/Server-2008 x64 Edition

Windows Real COM Drivers: Windows 95/98/ME, Windows NT, Windows 2000/XP/2003/Vista/7/Server 2008, Windows XP/2003/Vista/7/Server 2008 x64 Edition

Fixed TTY Drivers: SCO Unix, SCO OpenServer 5, SCO OpenServer 6, UnixWare 7, SVR4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD 5, FreeBSD 6

Linux Real TTY Drivers: Linux kernels 2.2.x, 2.4.x, 2.6.x

Management Software

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

Physical Characteristics

Housing: Aluminum, providing IP30 protection

Weight: 440±5 g

Dimensions: 28 x 126 x 93 mm (1.10 x 4.96 x 3.66 in)

Environmental Limits

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

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

Ambient Relative Humidity: 5 to 95% (30°C, non-condensing)

Power Requirements

Number of Power Inputs: 2 (terminal block)

Input Voltage: 12 to 48 VDC

Power Consumption: 12 to 48 VDC, 900 mA (max.)

Standards and Certifications (OnCell G3100-HSDPA series)

Safety: UL 60950-1

EMC: EN 55022 Class A, EN 55024, FCC Part 15 Subpart B Class A

Radio: FCC Part 22H, FCC Part 24E, EN 301 489-1, EN 301 489-7, EN 301 489-24, EN 301 511, PTCRB (OnCell G3150-HSDPA only)

Regulatory Approvals (OnCell G3100-HSDPA-JPS/JPN series)

EMC: VCCI (Japan)

Reliability

MTBF (mean time between failures): 380,000 hrs

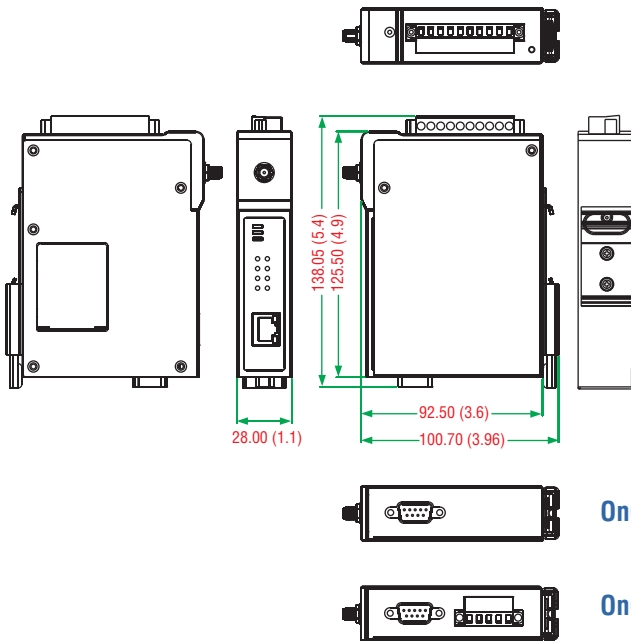
Warranty

Warranty Period: 5 years

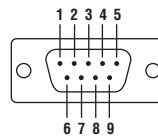
Details: See www.moxa.com/warranty

Dimensions & Pin Assignment

Unit: mm (inch)



DB9 male connector



PIN	RS-232	RS-422/485-4w	RS-485-2w
1	DCD	TxD-(A)	-
2	RxD	TxD+(B)	-
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	-	-
7	RTS	-	-
8	CTS	-	-
9	-	-	-

OnCell G3110-HSDPA Series

OnCell G3150-HSDPA Series

Ordering Information

Available Models

OnCell G3110-HSDPA: 1-port RS-232 to GSM/GPRS/EDGE/UMTS/HSDPA IP gateway with VPN

OnCell G3110-HSDPA-JPS: 1-port RS-232 to UMTS/HSDPA IP gateway with VPN, Japan Softbank

OnCell G3110-HSDPA-JPN: 1-port RS-232 to UMTS/HSDPA IP gateway with VPN, Japan NTT DOCOMO

OnCell G3150-HSDPA: 1-port RS-232/422/485 to GSM/GPRS/EDGE/UMTS/HSDPA IP gateway with VPN

OnCell G3150-HSDPA-JPS: 1-port RS-232/422/485 to UMTS/HSDPA IP gateway with VPN, Japan Softbank

OnCell G3150-HSDPA-JPN: 1-port RS-232/422/485 to UMTS/HSDPA IP gateway with VPN, Japan NTT DOCOMO

Note: Please visit Moxa's website for a complete list of optional wireless accessories and antennas available for Moxa's

Package Checklist

- OnCell IP gateway
- Rubber SMA antenna
- DIN-Rail kit
- Documentation and software CD
- Quick installation guide
- Warranty card