OnCell G3110/3150-HSDPA

Industrial tri-band UMTS/HSDPA IP modem

OnCell G3110-HSDPA   OnCell G3150-HSDPA

> Universal tri-band UMTS/HSDPA 850/900/2100 MHz
> Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, Reverse Real COM, and RFC2217
> Secure modes for TCP Server, TCP Client, Real COM, and Reverse Real COM
> Redundant DC power inputs
> LED indicators for status and signal level
> Two digital inputs and 1 relay output
> Configuration methods: Web console, serial console, Telnet
> DIN-Rail

The certification logos shown here apply to some or all of the products in this section. For details, see **Regulatory Approvals** under **Specifications** below.

: Overview

The OnCell G3110-HSDPA and OnCell G3150-HSDPA are industrial RS-232 and RS-232/422/485 UMTS/HSDPA IP modems designed to transmit data and short messages (SMS) over UMTS/HSDPA cellular networks. The Real COM operation mode automatically generates a virtual COM port to match serial ports supported by the OnCell G3110/3150-HSDPA, allowing you to connect to remote serial devices.

The CPU for the OnCell G3110/3150-HSDPA comes pre-installed with the TCP/IP protocol suite to transmit data back and forth between the serial device and cellular TCP/IP network, and comes with a built-in relay output that can be configured to indicate the priority of events when notifying or warning engineers in the field. The two digital inputs allow you to connect basic I/O devices, such as sensors, to the cellular network. The G3110/3150-HSDPA can be mounted on a DIN-rail, and the 12 to 48 VDC power input has a 2 KV EFT/Surge protector to allow the use of different types of field power source. The serial ports are also protected by 15 KV ESD line protection to keep your system safe from unexpected electrical discharges.

: Specifications

LAN Interface

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

Cellular Interface

Standard Band:
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

SIM Control: 3 V

Serial Interface

Serial Standards:
G3110-HSDPA: RS-232 (DB9 male connector)
G3150-HSDPA: RS-232 (DB9 male connector), RS-422/485 (5-pin terminal block connector)

Number of Ports: 1

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 1A @ 24 VDC

Digital Input: 2 inputs electrically isolated from the electronics

Software

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

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 v3, DDNS, IP Report, Web/Telnet/Serial Console, Serial Logging

Note: The features and specifications of this product are provided here for information purposes only. If you are interested in ordering this product, please contact a Moxa sales representative for details.

Authentication: Local user-name and password

Security: Accessible IP list

Utilities: Provided for Windows 98, ME, NT, 2000, XP, 2003, XP x64, 2003 x64, Vista x64

Windows Drivers: Windows 98, ME, NT, 2000, XP, 2003, XP x64, 2003 x64, Vista x64

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

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

Physical Characteristics

Housing: Aluminum, providing IP30 protection

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

Input Voltage: 12 to 48 VDC

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

Regulatory Approvals

Safety:
UL: UL60950

EMC:
CE: EN55022 Class A / EN55024
FCC: FCC part 15 subpart B, Class A
EN61000-4-2 (ESD) Level 4
EN61000-4-3 (RS) Level 3
EN61000-4-4 (EFT) Level 4
EN61000-4-5 (Surge) Level 3
EN61000-4-8 Level 3
EN61000-4-12 Level 3

RF:
FCC Part22H
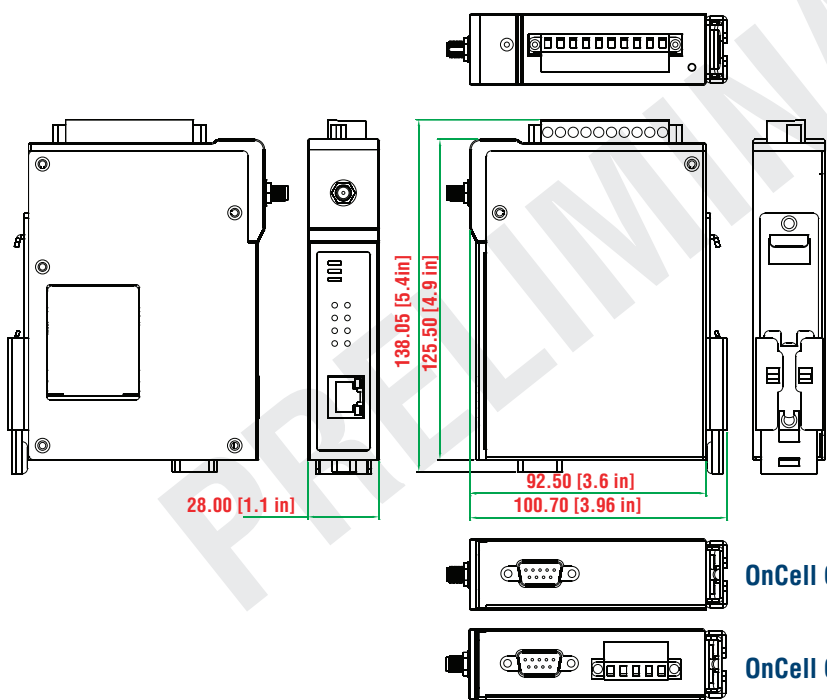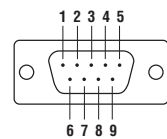FCC PART24E
EN301 489-1
EN301 489-7
EN301 511

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

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	–	–	–

138.05 [5.4in]
125.50 [4.9 in]
28.00 [1.1 in]
92.50 [3.6 in]
100.70 [3.96 in]

OnCell G3110-HSDPA

OnCell G3150-HSDPA

: Ordering Information

Available Models

OnCell G3110-HSDPA: 1-port RS-232 to UMTS/HSDPA IP modem
OnCell G3150-HSDPA: 1-port RS-232/422/485 to UMTS/HSDPA IP modem

Optional Accessories (can be purchased separately)

Power Adaptor: 1.2 A (or above) @ 12 V
DC Power Supply: See Appendix A
Power Jack to Terminal Block Cable: See Appendix A
Model Name ??: Tri-band UMTS/HSDPA Antenna (impedance = 50 ohms)
ANT-WCDMA-O-1.5 BK: Omni 1.5dBi/10cm, magnetic SMA antenna

Package Checklist

- OnCell G3100-HSDPA IP modem
- Rubber SMA antenna
- DIN-Rail Kit
- 5-pin Terminal Block (screw type)
- 10-pin Terminal Block (screw type)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card