microhard SYSTEMS INC.

3G Cellular Ethernet/Serial/USB Gateway

The IPn3G provides a secure industrial strength wireless solution using the 3G network infrastructure for critical data communications. The IPn3G features "Secure Communications" with its Integrated Firewall, IPSec / VPN Tunneling, IP and MAC Access Control Lists. It supports Ethernet, USB, and serial RS232 and RS485 data traffic.

- **Firewall / ACL**
- **IPSec / VPN, GRE**
- **Industrial Temperature**
- **Low Power**
- **2 Serial RS232/485 Ports**
- **USB 2.0**

The IPn3G provides a communications hub bringing together serial (RS232 and RS485), Ethernet, and USB channels into a single box. It provides secure, reliable communications where needed. It features flexible maintenance utilities, secure Firewall, Access Control Lists, IPSec / VPN and Network Management Utilities.

Features of the IPn3G

- *Fast 3G / HSPA Operation*
- *7.2Mbps Downlink / 5.76 Mbps Uplink*
- *Firewall with ACL Security*
- *IPSec, GRE / VPN Tunneling*
- *DMZ and Port Forwarding*
- *Low Power Consumption*
- *2 Serial Com Ports, 1 USB Port, and 1 Ethernet Port*
- *High Power (up to 2W on 850/900 MHz Bands)*
- *Wide Operating Temperature (-40°C to +85°C)*
- *User interface via local console, telnet, web browser*
- *Local and remote wireless firmware upgradable*

◆ **H S P A**   ◆ **S e r i a l / R S 4 8 5**   ◆ **E t h e r n e t / U S B**   ◆ **D M Z**   ◆ **F i r e w a l l**

IPn3G

Specifications

Supported Bands	HSPA & Quad Band GSM 850/1900/1700-2100 MHz (HSPA) 850/900/1800/1900 MHz (GSM)
Data Features	HSPA Up to 7.2 Mbps downlink Up to 5.76 Mbps uplink EDGE/GPRS Multi-Slot Class 12
TX Power	HSPA - Class 3 (0.25W) GSM 850/900 MHz - Class 4 (2W) GSM 1800/1900 MHz - Class 1 (1W) EDGE 850/900 MHz - Class E2 (0.5W) EDGE 1800/1900 MHz - Class E2 (0.4W)
Serial Interface	1 x RS232 (300 baud to 921k) 1 x RS232/422/485 (2/4 wire)
Serial Baud Rate	300bps to 921kbps
Serial Port Server	Extensive Serial Port Support. TCP server & client / UDP server & client / Modus /PPP / SMS / SMTP / AT command 2 Communication Port with Extensive RS232/485/422 support
USB	USB 2.0 USB Console Port USB to Serial Data Routing USB to Ethernet Data Routing (NDIS)
Ethernet	10/100 BaseT, Auto - MDI/X IEEE 802.3
GPS	GPS Server GPS UDP Reporting
Carrier Connection	Dial on Demand, PAP, CHAP, Idle Time, ICMP Keep Alive, DDNS, IP pass-through
Network Protocols	TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Serial over IP
Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, Site to Site Tunneling L2TP, GRE, HTTPS
Firewall	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists (IP filtering), Data origin / integrity Authentication, DMZ
Management	Local Serial Port Console, Telnet, WebUI, SNMP, Wireless Upgrade, RADIUS authentication, AT Command Interface
Diagnostics	RSSI, Ec/No, Voltage, Temperature, Remote diagnostics, Watchdog, UDP Reporting

Input Voltage		7-30VDC 12-24 VAC (optional)
Power Consumption @ 12V		Running: 90mA - 200mA
Connectors:	Antenna	SMA Female x3 (TX/RX, Diversity, GPS)
	Data	RJ-45 (Ethernet) Female DB9 Mini-USB
	SIM	1.8 / 3.0V
Environmental		
	Operating Temperature	-40°C to $+85^{o}$C -40°F to $+185^{o}$F
	Humidity	5-95%, noncondensing
Weight		Approx. 235 grams
Dimensions		Approx. 2.25" x 3.85" x 1.5" (57mm x 98mm x 45mm)
Approvals		PTCRB Approved FCC IC Carrier Specific Approvals

Order Options

-C1D2	Class 1 Div 2 (for use in hazardous environments)
-AC	12-24 VDC / VAC 50/60Hz

Authorized Distributor:
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