# HIGH SPEED 3.5G HSPA+ INTELLIGENT GATEWAY and APPLICATION SERVER

PremierWave® XC HSPA+ is an industrialgrade 3.5G wireless solution offering Penta-band HSPA+ performance, network redundancy, and enterprise-level security for mission critical applications, time sensitive event tracking, and M2M connectivity.



PremierWave® XC HSPA+ is a flexible and robust intelligent gateway and application server in a compact industrial-grade IP30 rated housing. It is ideal for deployment in remote locations either as a primary wireless connectivity to host multiple devices or as a backup when Ethernet connectivity fails. As with any Lantronix product, PremierWave XC HSPA+ is designed with ease of use in mind without compromising security.

### Safe & Secure Remote Access

PremierWave XC HSPA+ features the industry-proven Lantronix device server application suite and enterprise-level security (SSL, SSH, AES) allowing safe and secure remote access and management from practically anywhere.

### **Customizable & Versatile M2M Solution**

With three primary connectivity modes (Ethernet-to-Cellular Routing, Serial-to-Cellular Tunneling, and Serial-to-Ethernet Tunneling), customizable event tracking/notification, and multiple configuration modes (Web browser, CLI, and XML), PremierWave XC HSPA+ is an extremely versatile, secure, and easy to manage M2M wireless solution.



# PremierWave XC HSPA+ Highlights:

- Penta-band UMTS/HSPA+ (global coverage)
- Quad-band GSM/GPRS/EDGE
- Ethernet-to-Cellular Failover/Failback
- Ethernet-to-Cellular Routing
- Serial-to-Cellular Tunneling
- Serial-to-Ethernet Tunneling
- SMS Shoulder Tap, Relay Control, Event Notification, SMS Tunneling\*
- Lantronix Device Server Application Suite
- 1 10/100 Port, 2 Serial Ports, 2 Digital Inputs,
   1 Relay Output, 1 USB Port
- Industrial Grade Design
- 5-Year Limited Warranty



## **Features and Specifications**

### Cellular

- UMTS/HSPA+ (850/800/900/1900/2100 MHz)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)
- Transfer Rates up to 14.4 Mbps (downlink), up to 7.2 Mbps
- SMS Inbound Shoulder Tap, Relay Control, Tunneling\*
   SMS Outbound Event Notification, Tunneling\*
- 1 Secure STM Slot
- 2 x Omni-Directional Penta-band Antennas

### **Ethernet**

- 10BaseT and 100Base-TX Link (auto sensing MDIX, full and half duplex support)
  • RJ-45 Connector with LEDs (operation and link)
- 1.5 KV Isolation

### > Serial Interface

- Software selectable RS-232/422/485
- Software selectable RS-485 termination
- Serial data rates from 300 to 921 Kbps
- Characters: 7 or 8 data bits
- Parity: Odd, Even, None
- Stop Bits: 1 or 2
- Modem Control: DTR, DSR/DCD
- Flow Control: XON/XOFF (SW), CTS/RTS (HW)

### > Serial Connector

2 x DB9M (DTE) with 15KV ESD protection per port

### > USB Interface

USB Mass Storage Device Support

### > USB Connector

• 1 x USB Type A Host Connector (USB 2.0)

### > I/O Interface

### Input

- Connection: Sensors/Events
- Voltage acceptance: 0 to 30 VDC
  Digital input event: User configurable
- Optical: 1.5 KV

### Output

- Software: Turn Relay Output ON and OFF
- Automatic Event Trigger: ON or OFF (possible events include loss of cellular link, loss of Ethernet link, digital input event)
- Relay Output Response: User configurable
- Support 1A @24V

### > I/O Connectors

2 x Digital Input, 1 x Relay Output (Terminal Block)

### > LED Indicators

· Cellular Mode, Signal Strength, Serial RX/TX, USB Connection, System Status, Power, Ethernet Speed, Ethernet Activity

- > Routing/Gateway
   NAT, Port Forwarding, SPI Firewall
  - WAN Failover/Failback
  - Multiple Ethernet LAN Hosts
  - Multihoming

### > Protocol Support

- Network Services: SMTP Client, RSS, Telnet Server/Client, SNTP, FTP Server/Client, SFTP Server/Client, TFTP Server,
- Network Management: SNMP v1/v2c/v3\*
- Network Security: HTTPS Server/Client, SSH Server/Clent, SSL Server/Client, TLS, IPSec
- Network Protocols: ARP, HTTP, UDP/IP, TCP/IP, ICMP, BOOTP, DHCP, Auto IP, DNS
- Discovery Protocols: UPnP
- Industrial Protocols\*: Modbus TCP, Modbus RTU, Modbus **ASCII**

### > Event Triggers and Actions

- Events: Cellular Link State Change, Ethernet Link State Change, Digital Input State Change
- Actions: SMS, Email, HTTP Post, FTP Put, Relay Output, **SNMP Trap**

### > Security

- SSL v3, SSH v2, Client & Server, Supports up to 2048-bit
- Encryption: AES, 3DES, RC4 Authentication: SHA-1, MDS, Base-64 User Access Lists

### > Management

- Web Browser (SSL option for secure login)
- CLI (over Serial Ports, Telnet or SSH)
- XML Configuration Records via CLI or FTP
- Supports SNMP

### > Software

- Lantronix Device Server Application Suite
- DeviceInstaller

# **Ordering Information**

### **United States**

Call: 800.422.7055 Email: sales@lantronix.com

Buy Online: http://www.lantronix.com

**NASDAQ: LTRX** 

### Asia/Pacific

Call: +852.3428.2338

Email: asiapacific\_sales@lantronix.com

### lapan Call: +81.3.6277.8802

Call: +86.021.6237.8868 Email: Shanghai@lantronix.com

### > Part Number

# > Description

PXC2102H2-01-S

PremierWave XC HSPA+ Intelligent Gateway and Application Server, 2 Serial Ports, 2 Digital Inputs, Relay Output, USB, 10/100Base-T, 2 Antennas, Industrial Temperature, Universal Power Supply with Regional Adapters, RoHS

Europe

Call: +31 (0) 76.52.3.6.74 4

**Email:** EMEA@lantronix.com

**Email:** japan\_sales@lantronix.com

(USA only)

PXC2102H2-01-WYTM-S\*\* PremierWave XC / Wyless T-Mobile Network Service Bundle, PremierWave XC HSPA+ Intelligent Gateway, T-Mobile Network SIM, Free 30-Day Network Service Trial c/o Wyless, 2 Serial Ports, 2 Digital Inputs, Relay Output, USB, 10/100Base-T, 2 Antennas, Industrial Temperature, Universal Power Supply with Regional Adapters, RoHS

### > Power

- •Input Voltage: 9-30 VDC
- Power Consumption: 3.6 Watts (typical)
- Power Supply (100 240 VAC, 50-60 Hz, 12 VDC @ 1.8A) with locking barrel connector and regional adapters, -40° to +75°C

### > Environmental

- Operating Temperature\*\*\*: -40° to +70° C
- Storage Temperature: -40° to +85° C Relative Humidity: 5% to 95% non-condensing
- IP Rating: 30

- Agency Approvals / Compliance
   EMC FCC Part 15 Class B, IC, CE, EN55022, EN55024 Class B
  - RF FCC Part 22H, Part 24E, RSS 132,133, EN301-489-1, EN301 489-7, EN301 489-24, EN301 511, AS/ACIF 2042.1, 2042.3
  - Safety UL 60950-1, cUL 60950-1, IEC 60950-1, CSA C22.2 No. 60950-1-07, AS/NZS 60950:2000 • Network - PTCRB, R&TTE

  - Carrier Approval: AT&T
  - RoHS, REACH

### **> Dimensions**

- Size: (L x W x H): 109mm x 109mm x 30mm (4.3in x 4.3in x 1.2in) Weight: 0.24 kg (0.55 lb)

### > Warranty

5-Year Limited







### **PremierWave XC HSPA+ Top View**



\*Available in future F/W release

\*\*Wireless data applications and managed services for M2M communications (the "Services") are provided by Wyless, Inc. ("Wyless"). Coverage and availability of the Services may not be available in all areas. Lantronix, Inc. is not responsible for the quality, availability or non-availability of the Services, or for any transmission errors, corruption of data, or the security of data during transmission via public telecommunications facilities when utilizing the Services. Purchaser is responsible for payment to Wyless for all charges incurred for use of the Services beyond the 30-day free trial period.

\*\*\*UL rated to 60° C