



## XPort Embedded Device Server

- ▶ Minimal engineering effort required to web-enable virtually any electronic device
- ▶ Remote command and control of edge devices
- ▶ Real-time edge device status via e-mail alerts
- ▶ 256-bit AES encryption for secure communications
- ▶ EMC/EMI-compliant; RoHS-compliant
- ▶ Everything you need – all in a single RJ45 package



## Build Network Connectivity into Your Products, Quickly and Simply

XPort® is a compact, integrated solution to web-enable any device with serial capability. By incorporating XPort to a product design, manufacturers can offer network connectivity as a standard feature within weeks — so they can be accessed and controlled over the Internet.

### Full Networking in a Tiny Package

XPort removes the complexity – of designing network connectivity into a product by incorporating all of the required hardware and software inside a single embedded solution. Smaller than your thumb, it includes all essential networking features, including a 10Base-T/100Base-TX Ethernet connection, proven operating system, an embedded web server, e-mail alerts, a full TCP/IP protocol stack, and 256-bit AES encryption for secure communications. This easy-to-embed networking processor module enables engineers to focus on their core competency while reducing development time and cost and increasing product value.

### Integrated Network Communications Module

XPort is powered by our DSTni™ network processor SoC, which includes a 10/100 MAC/PHY and 256 KB of SRAM. It features a built-in web server for communications with a device via a standard Internet browser. Web capability can be used for remote configuration, real-time monitoring or troubleshooting. XPort has 512 KB of on-module Flash for web pages and software upgrades. It acts as a dedicated co-processor that optimizes network activities permitting the host microprocessor to function at maximum efficiency.

### Building Intelligent Devices

With XPort you can embed intelligence into any electronic product for applications such as:

- Remote diagnostics and upgrades
- Asset tracking and replenishment
- Automation and control
- Power management
- Remote collaboration
- Personalized content delivery

### Robust, Feature-Rich Software Suite

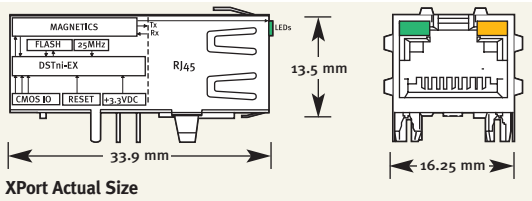
Eliminating the need to negotiate the intricacies of Transmission Control Protocol (TCP) or Internet Protocol (IP), XPort incorporates:

- Robust Real Time Operating System (RTOS)
- Full-featured network protocol stack
- Proven, ready-to-use serial-to-wireless application
- Built-in web server for device communication and configuration via a standard browser

The Windows-based DeviceInstaller™ makes configuring one or more XPorts in a subnet quick and easy.

- Install and configure XPort and load firmware
- Assign IP & other network specific addresses
- Set wireless parameters
- Load custom web pages and view specific device data
- Enable web-based configuration of the device
- Ping or query the attached device(s) over the network
- Allow Telnet communication with the device(s)





XPort Actual Size



## Features and Specifications

### Serial Interface

- Interface: CMOS (Asynchronous, 5V tolerant)
- Data Rates: 300 bps to 921,600 bps
- Characters: 7 or 8 data bits
- Parity: odd, even, none
- Stop Bits: 1 or 2
- Control Signals: DTR/DCD, CTS, RTS
- Flow Control: XON/XOFF, RTS/CTS
- Programmable I/O: 3 PIO pins (software selectable)

### Network Interface

- Interface: Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
- Connector: RJ45
- Protocols: TCP/IP, UDP/IP, ARP, ICMP, SNMP, TFTP, Telnet, DHCP, BOOTP, HTTP and AutoIP

### Indicators (LED)

- 10Base-T connection
- 100Base-TX connection
- Link & activity indicator - Full/half duplex

### Management

- SNMP, Telnet, serial, internal Web server, and Microsoft Windows<sup>®</sup>-based utility for configuration

### Security

- Password protection
- Optional 256-bit AES Rijndael encryption

### Internal Web Server

- Storage capacity: 384 KB for web pages

### Architecture

- CPU: Based on the DSTni-EX enhanced 16-bit, 48MHz or 88MHz x86 architecture
- Memory: 256 KB SRAM and 512 KB Flash
- Firmware: upgradeable via TFTP and serially

### Power

- Input voltage: 3.3 VDC

### Environmental

- Extended Temp: -40° to 85°C (-40° to 185°F)
- Commercial Temp: 0° to 70°C (32° to 158°F)
- Storage: -40° to 85°C (-40° to 185°F)

### Packaging

- Dimensions: 33.9 x 16.25 x 13.5 mm (1.33 x .64 x .53 in)
- Weight: 9.6 g (0.34 oz)

### Warranty

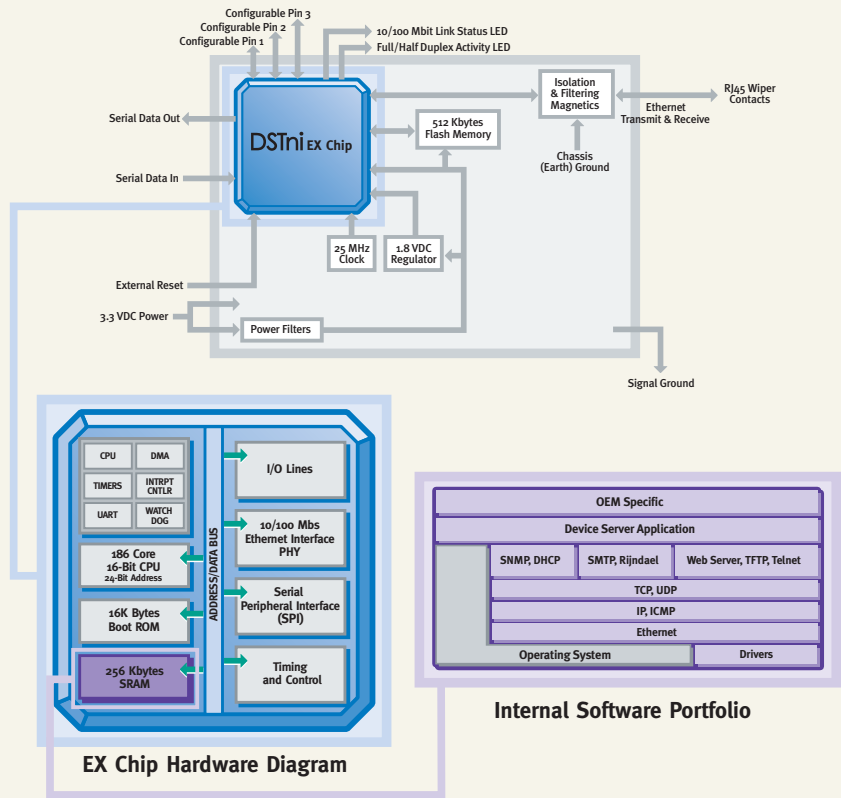
- 2-year limited warranty

### Included Software

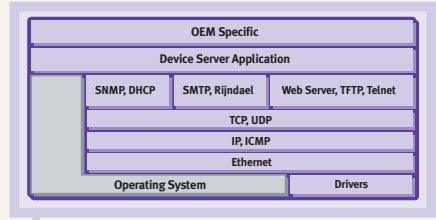
- MS Windows-based DeviceInstaller software and MS Windows-based Com Port Redirector

Model	Part Number	Description
XPort XE	XP1001000-03R	XPort RoHS Extended Temperature
Min. Quantity: 50 Units	XP1001001-03R	XPort RoHS Commercial Temperature
	XP1001000M-03R	XPort XE RoHS Extended Temperature, with MODBUS
XPort SE	XP1002000-03R	XPort RoHS Extended Temperature, with Encryption
Min. Quantity: 50 Units	XP1002001-03R	XPort RoHS Commercial Temperature, with Encryption
XPort SE SMPL	XP1002005-03R	XPort RoHS Extended Temperature, with Encryption - Sample
XPort 485	XP1004000-03R	XPort RS-485 RoHS Extended Temperature, with Encryption
XPort 485 SMPL	XP1004005-03R	XPort RS-485 RoHS Extended Temperature, with Encryption - Sample
XPort Evaluation Kit	XP100200K-03	XPort Evaluation Kit, with Encryption

## XPort Hardware and Software

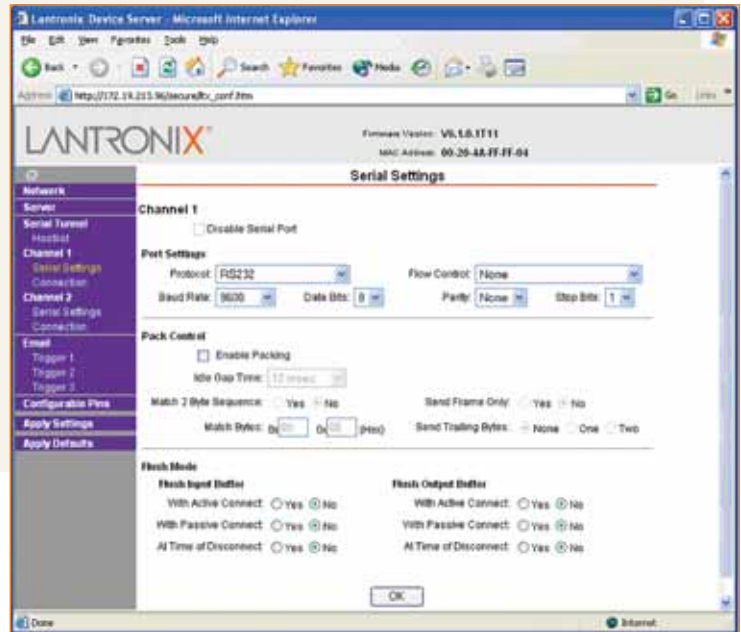


EX Chip Hardware Diagram



Internal Software Portfolio

The included DeviceInstaller software makes configuring XPort quick and easy!



## XPort Evaluation Kit

The XPort Evaluation Kit includes everything you need to integrate the XPort into your next product design, including:

- An XPort Evaluation Board and reference design including CAD PCB files and complete BOM
- Universal AC power adapter
- Network (CAT5) and serial cable
- Connector adapter
- Data sheet
- Lantronix utilities CD containing new Com Port Redirector, DeviceInstaller
- Sample code and application notes
- Complete user manual

