XPort® EDGE

Embedded Ethernet Gateway



THE ONLY INTELLIGENT EMBEDDED ETHERNET GATEWAY FOR BUILDING SECURE, CONNECTED PRODUCTS

XPort® EDGE is the only network communications engine for secure IoT connectivity and remote management that fits within a standard Ethernet connector. Requiring minimal engineering effort, the XPort EDGE allows device manufacturers to add fully integrated, secure Ethernet connectivity and control to their products in a few weeks.

Advanced Security Features

Leverage a comprehensive suite of built-in device security software with minimal integration effort. Lantronix TruPort® Security offers instant access to key features such as secure boot, secure firmware updates, secure connections, data-at-rest protection for keys and configuration and role-based access control.

Robust Data Connectivity

Reliably and securely communicate your device data with one or more applications on the local network or across the Internet. Utilize customer proven TruPort® Serial for transparent pass-through of hundreds of serial protocols or TruPort® Socket for multiple connections via TCP, UDP and HTTP(S) Server.

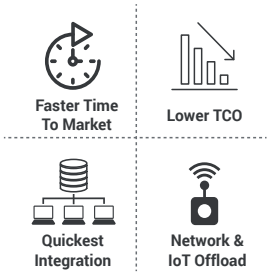
Remote Management & Cloud Connectivity

Add scalable remote device management and data access to your applications via Lantronix MACH10® cloud software platform.

Fastest Device Integration

Everything you need is included in the tiny RJ45 Ethernet connector package. Connect to any 8/16/32-bit microcontroller with a UART interface. Simplify your device application with fully offloaded network stack, robust security, connectivity and management software.

Key Benefits:



Highlights:

- Customer-proven Serial-to-Ethernet technology (TruPort® Serial and TruPort® Socket) for secure data communication
- Secure Boot, Secure Firmware Updates
- Built-in TruPort® Security for Data-at-Rest and Data-in-Motion Security
- Pre-Integration with MACH10® Software Platform for Remote Management and Application Integration
- SSL/TLS 1.2 with PKI and X.509 Certificate Management
- Secure Network Attach (EAPOL)
- Integrated RJ45 Ethernet Jack Magnetics, 10/100 Mbps PHY
- Industrial Operating Temperature Range (-40°C to + 85°C)

Features and Specifications

Data Communication

- TruPort® Serial Technology — TCP and UDP Server Mode, TCP and UDP Client Mode, Multi-host Connect; TLS Client and Server
- TruPort® Socket — Multi-host Client and Server Modes, HTTP(S) Server
- Authenticated SMTP Support — Send email directly from device

Security and Authentication

- TruPort® Security Software
  - Secure Boot, Secure Firmware-Over-the-Air (FOTA) Updates
  - Secure Key Storage, Encrypted Configuration
  - Secure Connections with SSL/TLS, HTTPS
  - Software Controlled Network Service Ports Enable/Disable
  - Role Based Access Control
  - IEEE 802.1X Network Access Control (EAPOL)
- SSLv3/TLS 1.2 with PKI and X.509 Certificates (up to 2048-bit Keys)
- TLS 1.2, AES (256-bit, 192-bit, 128-bit), up to 4096-bit RSA keys, SHA-2

Management Interfaces

- Lantronix MACH10® IoT Software Platform
- Serial Port, Telnet, Internal Web Server (HTTP/HTTPS), SNMP
- Lantronix Device Discovery Protocol (L2CAP)
- Secure Firmware Upgrade via HTTP, MACH10®

Protocol Support

- DHCP Client v4/v6, BOOTP
- Telnet Server, HTTP server
- IPv4/IPv6*, TCP/IP, UDP/IP, ARP, ICMP, Auto-IP, DNS

Ethernet Specifications

- IEEE 802.3 MAC and PHY, 10BaseT and 100BaseT with Auto-MDIX
- Auto Negotiation; Full duplex and half duplex support
- Link Activity LED Indicators

Serial Interface Specifications

- 1x UART (Serial) Ports
- CMOS (Asynchronous) 3.3V Level Signals
- Data Rates: 300 bps to 921 kbps (software selectable)
- Data Bits: 7 or 8; Stop Bits: 1 or 2; Parity: Odd, Even or None
- Control signals: DTR/DCD, RTS/CTS
- Flow Control: XON/XOFF (software), RTS/CTS (hardware), None

Configurable I/Os

- Programmable I/O: up to 3 CPs
- I/O Voltage: 3.3V

Architecture

- CPU: Cortex R4 up to 320 MHz
- Storage: 8MB SPI Flash; 1MB for FileSystem

Power

- Input Voltage: 3.3VDC
- Current consumption: 160 mA (100-BaseT); 180 mA (10-BaseT)

Environmental

- Operating Temp: -40°C to +85°C
- Storage Temp: -40°C to +85°C
- Storage Humidity: 5% to 95% relative humidity, non-condensing

Dimensions

- Dimensions: 33.9 x 16.25 x 13.5 mm (1.33 x 0.64 x 0.53 in)
- Weight: 9.6g (0.34 oz)

Packaging

- Tray: 50 units/tray (200 units Carton)
- Sample: 1 unit (Box)

*IPv6 Support Planned for Q1 CY 2019

Developer Tools

- SDK available for download from Lantronix
- For more information, refer to:
  - docs.lantronix.com/products/xport-edge/sdk

Certifications

- FCC, EU, Canada Class B emission/immunity and UL/CB 60950/62368 safe

For other certifications, please refer to the XPort EDGE Data Sheet.

Warranty

- 2 Year Limited

Gateway Management Software Applications

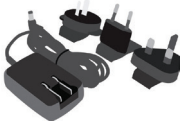
Gateway Central™

MACH10® Global Device Manager

XPort EDGE® Evaluation Kit



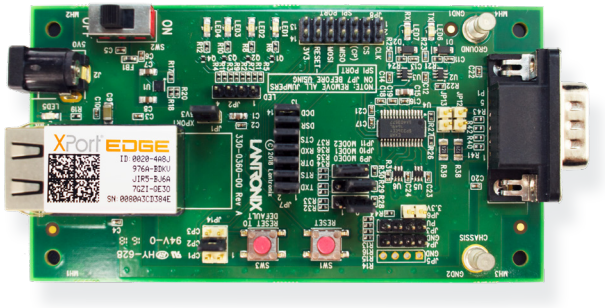
RJ45 to RJ45 Cable



5V Power Supply



DB9F to DB9F Null Modem Cable



Product Variants

Part Number	Description
XPE200100B	XPort EDGE Secure Embedded Ethernet Gateway, Bulk
XPE200100S	XPort EDGE Secure Embedded Ethernet Gateway, Sample
XPE200100EK	XPort EDGE Evaluation Kit

Ordering Information

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