xPort EDGE



THE ONLY INTELLIGENT EMBEDDED ETHERNET GATEWAY

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. Integrated with Lantronix's Percepxion™ cloud-based IoT edge solution.

Advanced Security Features



Leverage a comprehensive suite of built-in device security software with minimal integration effort. Lantronix Infinishield™ 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 Percepxion™ cloud-based IoT edge solution.



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 Infinishield™ Security for Dataat-Rest and Data-in-Motion Security
- Pre-Integration with Percepxion™ 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
- · Modbus TCP to Modbus RTU/ASCII gateway

Security and Authentication

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

Protocol Support

- DHCP Client v4/v6, BOOTP
- · Telnet Server, HTTP server
- IPv4/IPv6*, TCP/IP, UDP/IP, ARP, ICMP, Auto-IP, DNS
- SNMP v1/v2
- IPv6

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: 4Mbps (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)

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 safety.
- IPv6
- For other certifications, please refer to the XPort EDGE Data
 Sheet





Perception™ IoT Edge solution platform

XPort EDGE® Evaluation Kit







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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