



xPico® 200 Series

TECHNOLOGY PREVIEW

Embedded Wireless
IoT Gateway



THE INDUSTRY'S SMALLEST EMBEDDED IOT GATEWAY

IoT. Accelerated. Delivering seamless and secure Ethernet, Wi-Fi and/or Bluetooth connectivity, the Lantronix xPico® 200 series allows OEMs to go to market faster with their smart IoT solutions. Featuring advanced enterprise security, networking intelligence, and pre-integration with the MACH10™ management software platform, the xPico® 200 series delivers the power of an IoT gateway in an industry-leading compact footprint.



Robust Connectivity For Reliable Data Access & Management

The xPico® 200 series makes it easy to deploy robust Ethernet, Wi-Fi and Bluetooth connectivity that provides reliable and secure data access and management for your smart IoT solution — whether it is through multiple applications on the local network or across the Internet. Field-tested TruPort® Serial delivers transparent pass-through of hundreds of serial protocols and TruPort Socket allows for multiple connections via TCP, UDP or TLS.



Easy-to-Deploy Networking Intelligence For Your Machine

Simplify device firmware complexity with a completely offloaded secure networking communications engine. Securely connect to enterprise Ethernet or Wi-Fi networks. Get to market quickly by utilizing production ready network stack, robust security, connectivity and management software.



Comprehensive Device Security Framework

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



Scalable IoT Management Software To Enhance The User Experience

Add scalable remote device management and data access to your applications via Lantronix MACH10™ cloud software platform. Utilize IoT optimized protocols such as MQTT and WebSockets for communications with other cloud based applications.

xPico® 200 Highlights

- Robust dual-band 802.11 a/b/g/n Wi-Fi
- Bluetooth Smart Ready 4.2 (xPico 250)
- Lantronix Soft AP+Client allows for device support and access without disrupting machine field operation
- TruPort® Security ensures enterprise level security of both data-at-rest and data-in-motion
- TruPort® Serial and TruPort® Socket technology supports a wide range of communication protocols
- Industrial grade design for operation in extreme environments (-40 C to +85 C)

Ideal For



Industrial



Medical Devices



Retail



Resource
Management

LANTRONIX



Features and Specifications

Network

Wireless Specifications

- IEEE 802.11 a/b/g up to 54 Mbps ; 802.11 n (1x1) up to 150 Mbps
- 20, and 40 MHz channel width with optional SGI
- Dual Band 2.4 GHz and 5 GHz, Channels 1-14, UNII-1, 2, 2e and 3
- Supports IEEE 802.11 d/h/j/i/r/w/k
- Bluetooth/WLAN Coexistence

Ethernet Specifications

- IEEE 802.3 MAC, 10BaseT and 100BaseT (RMII)

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), Sockets, TLS
- Authenticated SMTP Support— Send email directly from device

Security and Authentication

- TruPort® Security Software
 - Secure Boot, Secure Firmware Upgrades
 - Secure Key Storage, Encrypted Configuration
 - Secure Connections with SSL/TLS, HTTPS
 - Software Controlled Network Service Ports Enable/Disable
 - Role Based Access Control
- AES/CCMP and TKIP encryption, WPA/WPA2 Personal
- WPA2 Enterprise (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST)
- SSLv3/TLS 1.2 with PKI and X.509 Certificates (up to 2048-bit Keys)
- NIST Certified AES (FIPS-197) Algorithm, 256-bit, 192-bit, 128-bit

Management Interfaces

- Lantronix MACH10™ Cloud Software Platform—MQTT
- Serial Port, Internal Web Server (HTTP/HTTPS), SNMP
- XML Configuration and XML Status (CLI, API)
- Secure Firmware Upgrade via HTTP, MACH10

Protocol Support

- DHCP Client, Server (Soft AP), HTTP Server/Client
- IPv4/IPv6¹, TCP/IP, UDP/IP, ARP, ICMP, Auto-IP, DNS

Wireless Features

- Concurrent Soft AP + STA (Client), Client, Soft AP, Wi-Fi Direct
- Up to 5 simultaneous client connections to Soft AP interface
- Connect to multiple WLAN networks, WLAN QuickConnect
- Ethernet to Wi-Fi Client Bridge (Single Host Mode), Auto-MAC ID

Power

- Input Voltage: 3.3VDC
- Max Current Consumption: TBD; Standby Mode: TBD

Environmental

- Operating Temp: -40°C to +85°C; Storage Temp: -40°C to +85°C
- Storage Humidity: 10% to 90% relative humidity, non-condensing

¹ IPv6 availability in 1H CY2018

Host Interfaces

- Serial: UART Port TTL
 - Data Rates: 300 bps to 921 kbps (software selectable)
 - Control signals: DTR/DCD; Flow Control: RTS/CTS; XON/XOFF
- USB (Host), I2C, SDIO, 17 Programmable I/O Pins
- System Pins: RESET, DEFAULT, WAKE

Dimensions & Packaging

- Dimensions: 17mm x 25mm x 2mm; Weight: TBD
- Tape and Reel: 250 units/reel

Certifications

- FCC Part 15 Class B, 15.247, 15.407; ICES-003 Issue 4, RSS-210
- EU RED Directive (2017);
- C-Tick (AS/NZS CISPR2:2006); AS/NZS 4771:2000 + A1:2003
- SRRC
- Japan Radio Cert Article 2-1 (19), (19-2), (19-3), (19-3-2)
- EN 60950:2001; IEC 60950
- Wi-Fi Alliance Certified (802.11a/b/g/n)

Warranty

- 5-Year Limited

Ordering Information

Part Number	Description
XPC240100B	xPico 240 Emb GW, Wi-Fi, Eth, Dual u.fl, LGA, BULK
XPC240200B	xPico 240 Emb GW, Wi-Fi, Eth, Module Ant, LGA, BULK
XPC240300B	xPico 240 Emb GW, Wi-Fi, Eth, Dual u.fl, Edge, BULK
XPC240300K	xPico 240 Evaluation Kit with Edge Connector Module
XPC250100B	xPico 250 Emb GW, Wi-Fi, Eth, BT, Dual u. fl, LGA, BULK
XPC250300B	xPico Emb GW, Wi-Fi, Eth, BT, Dual u. fl, Edge, BULK
XPC250300K	xPico 250 Evaluation Kit with Edge Connector Module

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