xPico® 240 Series

Embedded Wi-Fi IoT Gateway



THE BEST-IN-CLASS EMBEDDED SOLUTION FOR MANAGED INDUSTRIAL WIRELESS CONNECTIVITY

Highly Integrated Wi-Fi in a Compact Design

Dual-band Wi-Fi, antenna diversity, Enterprise Wi-Fi security and robust wireless connectivity management deliver higher performance and scalable deployment within noisy industrial and enterprise settings. The xPico 240 embedded gateway makes it easy to deploy robust Ethernet and Wi-Fi connectivity without writing complex drivers. The industry-leading compact SMT footprint of the xPico 240 allows it to fit it into any design and operate in extreme environments.

Robust Connectivity for Reliable Data Access and Management

Simplify embedded application development and go to market faster with the xPico 240 gateway's built-in network communications engine and flexible system integration modes. Completely offload IoT communications from your embedded microcontroller when operating as a network co-processor or use it as a wireless microcontroller with the provided SDK.

Field-tested TruPort® Serial supports transparent pass-through of hundreds of proprietary serial and standard Fieldbus protocols and TruPort® Socket enables complete control over multiple connections via TCP, UDP or TLS. Configure and control the gateway operation from the host microcontroller side using command mode or the network side with Web Service APIs and XML configuration data.

Comprehensive Device Security Framework

The xPico 240 embedded IoT gateway includes a comprehensive suite of built-in device security applications that offer robust and secure connections, data-at-rest protection for keys, configuration, secure boot and secure firmware-over-the-air (FOTA) updates, user role-based access control and fine-grained policy-based network service control.

Centralized Device Management Platform

Monitor, manage, and control your devices from anywhere, at any time with the ready-to-use software platform web application, providing software-defined automation with zero-touch provisioning across all of your devices and the capture of device telemetry data for event management and analysis..

xPico® 240 Key Benefits

- Faster Time to Market
- Enterprise-Grade Security
- Robust Data Handling
- Highest Integration

xPico® 240 Highlights

- Dual-band Wi-Fi (802.11 a/b/g/n) and Ethernet
- Automatic network connection management
- Concurrent Soft AP + client mode for direct wireless service access without disrupting machine field operations
- Enables operation as network co-processor or wireless MCU
- Pre-integrated with the ConsoleFlow Device Management Platform
- Global Certification (FCC, RED, IC, ETSI, Japan, AU/NZS, China)
- Industrial-grade design for operation in extreme environments (-40 C to +85 C)

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xPico® 240

Embedded Wi-Fi IoT Gateway

Features and Specifications

Network

Wireless LAN 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
- Supports IEEE 802.11 d/h/i

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
- Modbus TCP to Modbus RTU/ ASCII gateway

Security and Authentication

- Infinishield™ Security Suite
  - 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
- 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 (upto 4096-bit Keys)
- AES Algorithm, 256-bit, 192-bit, 128-bit

Management Interfaces

- ConsoleFlow Software Management Platform
- Lantronix Discovery Protocol (77FE)
- Serial Port, Internal Web Server (HTTP/HTTPS)
- XML Configuration and XML Status (CLI, API)

Protocol Support

- DHCP Client, Server (Soft AP), HTTP Server/Client
- IPv4, TCP/IP, UDP/IP, ARP, ICMP, Auto-IP, DNS
- SNMP v1/v2
- IPv6

Wireless Features

- Concurrent Soft AP + STA (Client), Client, Soft AP
- Up to 6 simultaneous client connections to Soft AP interface
  - Up to 4 in Concurrent Mode
- Connect to multiple WLAN networks, WLAN QuickConnect
- Ethernet to Wi-Fi Client Bridge (Single Host Mode), Auto-MAC ID

Operating Conditions

- Operating Temp: -40°C to +85°C; Storage Temp: -40°C to +100°C
- Vibration (Operational): 40G; Non-operational Shock: 65G
- Storage Humidity: 5% to 85% relative humidity, non-condensing

Host Interfaces

- Serial: UART Port TTL
  - Data Rates: 9600 bps to 4 Mbps (software selectable)
  - Control signals: DTR/DCD; Flow Control: RTS/CTS; XON/XOFF
- USB (Host)
- 12 Programmable I/O Pins
- System Pins: RESET, DEFAULT, WAKE

Power

- Input Voltage: 3.3VDC
- Max Current Consumption (Boot Peak): 580 mA
- Standby Mode: 30uA

Dimensions & Packaging

- Dimensions: 17mm x 25mm x 2mm (LGA); 22mm x 35.5mm x 2.73 mm (Edge Card)
- For LGA: Tape and Reel, MSL 3
- For Edge Connector: Tray

Certifications & Compliance

- Type Approvals: USA (FCC Part 15), Canada (IC RSS), EU (RED), Japan (MIC), China (SRRC), AU/NZS
- Safety: IEC 62368, EN 62368, EN 62311, UL 60950
- RoHS, REACH
- IPv6 certification

Warranty

- 5-Year Limited

Related Products

- XPC240300EK - xPico 240 Embedded Gateway, Evaluation Kit, Wi-Fi + Ethernet

xPico 240 is Ideal for :



Industrial Automation



Medical Devices



Responsive Retail



Resource Management

Product Variants

Model Number	Description
XPC2401	xPico 240 Embedded Gateway, Wi-Fi, Ethernet, Dual u.fl Antenna, LGA
XPC2402	xPico 240 Embedded Gateway, Wi-Fi, Ethernet, On-module Antenna, LGA
XPC2403	xPico 240 Embedded Gateway, Wi-Fi, Ethernet, Dual u.fl Antenna, Edge Connector
XPC2404	xPico 240 Embedded Gateway, Wi-Fi, Ethernet, On-module Antenna, Edge Connector

Learn More About xPico 240

For contact information, go to **www.lantronix.com**
For product details, please see the **xPico 240 Documentation**

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