



FLEXIBLE, MOBILE-READY, WI-FI® SOLUTION FOR ARDUINO® BASED M2M AND IOT APPLICATIONS

The Lantronix® xPico® Wi-Fi® Shield is a perfect match for your Arduino® microcontroller board. Wi-Fi connectivity for your Internet of Things (IoT) projects can be performed quickly and easily with the Lantronix xPico Wi-Fi Shield.



Arduino – Easy & Flexible Development Environment

Arduino is an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. A single-board microcontroller, the Arduino platform is intended to make the application of interactive objects or environments more accessible.

xPico Wi-Fi - Mobile-Ready Wi-Fi Solution

The Lantronix xPico® Wi-Fi® embedded device server is one of the world's smallest and most flexible Wi-Fi device servers. The xPico Wi-Fi module is a pin and form factor compatible state-of-the-art member of the Lantronix xPico family, providing low power, Soft AP and simultaneous client mode, full IP and WLAN stacks. As a true IEEE 802.11 b/g/n compliant Wi-Fi solution, the xPico Wi-Fi module ensures highest speed operation for all WLAN networks. The xPico Wi-Fi device server is a great choice when developing mobile enabled M2M applications.

Combine xPico Wi-Fi & Arduino – Easily Wi-Fi Enable Your Design

The Lantronix xPico Wi-Fi Shield retains the simplicity and flexibility of the Arduino platform while augmenting the Arduino microcontroller boards with Wi-Fi connectivity. The product's industrial-ready quality and ease-of-use allows engineers, students and hobbyists to rapidly add both Wi-Fi client and soft access point (Soft AP) capabilities, while offloading the TCP/IP stack and networking applications like a web server to the xPico Wi-Fi.

xPico Wi-Fi Shield Highlights:

- Compatible with the Arduino open-source hardware platform
- Simple and easy to use interface
- xPico Wi-Fi module with integrated software
 - Mobile-ready, with simultaneous client and software access point (AP) mode
 - Integrated connection manager
 - IEEE 802.11 b/g/n (2.4 GHz) compliant
 - Low power (6 μ A Standby)
 - Full TCP/IP stack and Web Application Server
 - Multiple interface choices, including Serial Port (921 kbps), SPI with clock rate of 30MHz
- Extended temperature : -40° to +85° C
- 1-Year limited warranty

Features and Specifications

> Wireless LAN Interface

- IEEE 802.11 b/g and IEEE 802.11n (single stream) WLAN interface (2.4 GHz only)
- IEEE 802.11 d/h/i/j/k/w/r
- u.FL connector for external antenna

> Serial Interface

- A serial CMOS Port (3.3V, 5V tolerant)
- 300 to 921.6 Kbps

> SPI Interface

- 30 MHz clock

> Network Protocols

- TCP/IP, UDP/IP*, DHCP, ARP, ICMP, DHCP, Auto-IP, DNS

> Networking Capabilities

- Soft Access Point with DHCP Server
- Simultaneous Soft AP and Client modes
- QuickConnect: Dynamic Profiles facilitate easy and rapid connections to access points.
- WLAN Profiles: connect to multiple wireless networks

> Software Applications

- Lantronix Tunnel Application: Enables easy serial port data access over the TCP/IP Network
 - Transparent Tunneling mode
 - Modem Emulation mode
- SNTP Support: Presents current date and time to Arduino applications
- HTTP web services API: For remote configuration and control
- Web Enable Arduino application data via the point and click Explorer utility
- File System

> Management and Control

- Web Server - Landing Page
- CLI (Serial Monitor Port)
- XML Import and Export (XCR)
- Field upgradable firmware (OTA)

> Security

- IEEE 802.11i Support – WPA-Personal, WPA2-Personal
- 256-bit AES Encryption*

> Power

- Input Voltage: 3.3VDC
- Low power consumption of approximately 6µA standby

> Environmental

- Operating Temperature: -40° to +85° C
- Relative Humidity: 0% to 90% non-condensing

> Certifications

- FCC Class B, UL and EN EMC

> Warranty

- 1-Year Limited -xPico Wi-Fi Shield

*Available through future firmware update

Other members of the Lantronix xPico Embedded Device Server product family:

xPico Wi-Fi for Freescale Tower Module System

xPico Wi-Fi Pi Plate

Full featured Wi-Fi device server module for robust and ease of use for the popular Raspberry Pi® single board computer.

xPico Embedded Device Server

A chip-sized networking solution that enables Ethernet connectivity on virtually any device.

Ordering Information

United States

Call: 800.422.7055

Email: sales@lantronix.com

Buy Online: <http://www.lantronix.com>

NASDAQ: LTRX

Europe

Call: +31 (0) 76.52.3.6.74 4

Email: EMEA@lantronix.com

Asia/Pacific

Call: +852.3428.2338

Email: asiapacific_sales@lantronix.com

Japan

Call: +81.3.6277.8802

Email: japan_sales@lantronix.com

China

Call: +86.021.6237.8868

Email: Shanghai@lantronix.com

> Part Number

XPCW1001000AR-K

XPW1001000-01

XPW100100S-01

XPW100100K-01

XPC100A001

> Description

xPico Wi-Fi IEEE 802.11 b/g/n Device Server Shield w/ xPico Wi-Fi Module, RoHS, Arduino computer board not included

xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Module, Extended Temp, Bulk, RoHS

xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Module, Extended Temp, Sample, RoHS

xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Evaluation Kit w/ xPico Wi-Fi Module, RoHS

xPico Module Mounting Quick Clip Bulk pack(50 pc) (Extra clip)