



FLEXIBLE, MOBILE-READY, Wi-Fi SOLUTION FOR ARDUINO BASED M2M AND IOT APPLICATIONS

Lantronix® xPico® Wi-Fi® embedded device server is now available as an Arduino Shield — a perfect match for your Arduino Microcontroller board. Wi-Fi connectivity for your Internet of Things (IoT) projects can be done quickly and easily with the Lantronix xPico Wi-Fi Shield for Arduino.



Wi-Fi Enable Your Design

Arduino is an open-source electronics platform for students, hobbyists and professional engineers interested in creating interactive objects or environments. It has gained a lot of traction as a tool to develop connected hardware and software applications using flexible hardware extensions called “shields.”

The Lantronix xPico Wi-Fi Shield for Arduino 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 and designers 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.

Make Your Applications Mobile-ready!

Reduce your development costs, shorten your time to market, and leverage mobile solutions using simple configuration with xPico® Wi-Fi, one of the world’s smallest and most flexible embedded Wi-Fi device servers.

Arduino® 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
 - ⇒ Low power (6 μ A Standby)
 - ⇒ Full TCP/IP stack and Web Application Server

xPico® Wi-Fi Highlights:

- IEEE 802.11 b/g/n (2.4 GHz)
- Multiple Interface Choices; including Serial Port (921 kbps), SPI with clock rate of 30MHz
- Extended Temperature : -40° to +85° C
- 5-Year Limited Warranty

FEATURES AND SPECIFICATIONS

Preliminary

> Wireless LAN Interface

- IEEE 802.11 b/g and IEEE 802.11n (single stream) WLAN interface (2.4 GHz only)
- u.FL connector for external antenna

> Serial Interface

- A serial CMOS Ports (3.3V, 5V tolerant)
- 300 to 921.6 Kbps
- Lantronix tunneling application

> 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
- Lantronix SmartRoom™ Technology continually tracks Wi-Fi signal strength within range, along with pre-authentication and caching resulting in smooth and automatic transition to access points without delay.
- QuickConnect: Dynamic Profiles facilitate easy and rapid connections to access points.

> 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 - Arduino Shield
- 5-Year Limited xPico Wi-Fi device

Other members of the xPico product family:

xPico Wi-Fi Tower Module for Freescale Tower System .

xPico Wi-Fi PI Plate for Raspberry Pi®: Full featured Wi-Fi device server module for robust and ease of use for the popular Raspberry Pi.

xPico: 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>

Asia/Pacific

Call: +852 3428.2338

Email: asiapacific_sales@lantronix.com

China

Call: +86.021.6237.8868

Email: Shanghai@lantronix.com

Europe

Call: +31 (0) 76.52.3.6.74 4

Email: EMEA@lantronix.com

Japan

Call: +81.3.6277.8802

Email: japan_sales@lantronix.com

> Part Number

> Description

XPCW1001000AR-K	xPico Wi-Fi IEEE 802.11 b/g/n Device Server Arduino Shield: w/ xPico Wi-Fi Module, RoHS, Arduino computer board not included
XPW1001000-01	xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Module, Extended Temp, Bulk, RoHS
XPW100100S-01	xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Module, Extended Temp, Sample, RoHS
XPW100100K-01	xPico Wi-Fi— IEEE 802.11 b/g/n Device Server Evaluation Kit w/ xPico Wi-Fi Module, RoHS
XPC100A001	xPico Module Mounting Quick Clip Bulk pack(50 pc) (Extra clip)

* Available through future firmware update