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 µA 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

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<thead>
<tr>
<th>Country</th>
<th>Call</th>
<th>Email</th>
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<tbody>
<tr>
<td>United States</td>
<td>800.422.7055</td>
<td><a href="mailto:sales@lantronix.com">sales@lantronix.com</a></td>
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<tr>
<td></td>
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<td><a href="http://www.lantronix.com">http://www.lantronix.com</a></td>
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<td>NASDAQ: LTRX</td>
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<td>Europe</td>
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<td>+86.021.6237.8868</td>
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<tr>
<th>Part Number</th>
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<tr>
<td>XPCW1001000AR-K</td>
<td>xPico Wi-Fi IEEE 802.11 b/g/n Device Server Shield w/ xPico Wi-Fi Module, RoHS, Arduino computer board not included</td>
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<td>xPico Wi-Fi—IEEE 802.11 b/g/n Device Server Evaluation Kit w/ xPico Wi-Fi Module, RoHS</td>
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<td>XPC100A001</td>
<td>xPico Module Mounting Quick Clip Bulk pack (50 pc) (Extra clip)</td>
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