Lantronix® combines its industry-proven xPico® Wi-Fi® embedded device server with industry leading Freescale microcontrollers onto a ready-to-go tower module. Now prototyping designs can be done quickly and easily resulting in a shorter time to market and reduced development costs.

Quickly Prototype Your Design
Compatible with a wide range of Freescale embedded microprocessors and controllers, the Lantronix xPico Wi-Fi tower module for the Freescale Tower System offers a powerful, versatile, and modular development platform enabling countless options for prototyping.

The tower module seamlessly integrates the Lantronix xPico Wi-Fi embedded device server with a Freescale microcontroller by plugging into the tower form factor. Its industrial ready quality and ease of use allows you to rapidly prototype your design. More precisely by using the MQX examples provided to add Wi-Fi capability to a Freescale Kinetis Cortex-M4 microcontroller, all while offloading the TCP/IP stack and networking applications like a webserver to the xPico Wi-Fi. Additionally, the Freescale microcontroller can maintain mission-critical functions without having to service network interrupts.

xPico Wi-Fi Tower Module Highlights:
- Compatible with the Freescale Tower System
- Simple and easy to use
- Shorten product development time

xPico Wi-Fi Highlights:
- Low power (6µA Standby)
- IEEE 802.11 b/g/n (2.4 GHz)
- Complete device server application with full IP Stack and web server
- Mobile ready with SoftAP and simultaneous client
- Multiple interface choices; including, serial data rate (921 kbps), SPI with clock rate of 20MHz*, full rate USB (device)*
- Extended temperature : -40° to +85° C
- 5-Year limited warranty

Lantronix® xPico® Wi-Fi® Freescale Tower System Module Evaluation Kit
Features and Specifications

Wireless LAN Interface
- IEEE 802.11 b/g and IEEE 802.11n (single stream) WLAN interface (2.4 GHz only)
- WPS 2.0 support
- u.FL connector for external antenna

Serial Interface
- Two Serial CMOS Ports (3.3V, 5V tolerant), connected to Tower elevator for connection to MCU
- 300 to 921.6 Kbps
- Flow control XON/XOFF, RTS/CTS (SPort 1 only)
- Lantronix tunneling application

SPI Interface*
- 20 MHz clock
- Connected to Tower elevator for connection to MCU

Network Protocols
- TCP/IP, UDP/IP, DHCP, ARP, ICMP, DHCP, Auto-IP, DNS, SNMPv1

Networking Capabilities
- Soft Access Point with DHCP Server
- Simultaneous Soft AP and Client modes
- Lantronix SmartRoam™ 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 20µA standby

Physical Interface
- Standard Freescale Tower

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

Certifications
- FCC Class B, UL and EN EMC

Packaging
- TBD

Warranty
- 1-Year Limited - Tower Board
- 5-Year Limited xPico Wi-Fi device

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWR-LTRX-XPWK</td>
<td>xPico Wi-Fi Tower Module for Freescale Tower System w/xPico Wi-Fi Module (Freescale Tower System not included)</td>
</tr>
<tr>
<td>XPW1001000-01</td>
<td>xPico Wi-Fi—IEEE 802.11 b/g/n Device Server Module, Extended Temp, Bulk, RoHS</td>
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<tr>
<td>XPW100100S-01</td>
<td>xPico Wi-Fi—IEEE 802.11 b/g/n Device Server Module, Extended Temp, Sample, RoHS</td>
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<tr>
<td>XPC100A001</td>
<td>xPico Module Mounting Quick Clip Bulk pack (50 pc)</td>
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* Available through future firmware update