xPico® Wi-Fi®

Embedded Wireless Device Server

THE MOST FLEXIBLE, MOBILE-READY, Wi-Fi® SOLUTION FOR M2M AND IOT APPLICATIONS

Reduce your development costs, shorten your time to market, and leverage mobile solutions with xPico® Wi-Fi®, one of the world's smallest and most flexible Wi-Fi device servers. xPico Wi-Fi is a pin and form factor compatible state-of-the-art member of the xPico family, providing low power, Soft AP and simultaneous client mode, full IP and WLAN stacks. The xPico Wi-Fi is a complete device server suitable for mobile M2M applications and includes industry best 5-year warranty.

xPico Wi-Fi
Actual Size

24mm

16.5mm

Tablet & Smartphone Enable Your Devices

Access your data and devices from anywhere – wired or wireless. Lantronix® industry-proven device server application and protocol stacks enables seamless remote access to device data, simplifying design integration, all while providing robust connectivity – including the ability to access data from any mobile device, including smartphones and tablets.

Robust Networking Solution

Lantronix' xPico Wi-Fi is an extremely compact, low power networking solution that enables wireless LAN connectivity on virtually any solution with a SPI, USB (device) or serial interface.

Simultaneous Access Point & Client Mode

The xPico Wi-Fi is a state-of-the-art solution that offers all the functions one can expect including a unique simultaneous Soft AP and client mode. This allows for easy points of access while maintaining a secure network connection.

Flexibility

All members of the xPico product family use the same pin compatible interface, providing unmatched flexibility whether it is Wi-Fi or Ethernet when it comes to choosing the right network device for your application.

Cost Savings & Faster Time-To-Market

As one of the smallest embedded device servers in the world, xPico Wi-Fi can be utilized in designs typically intended for chip solutions, befitting in advantages to cost and time-to-market. Its "zero host load" eliminates any need for drivers on the connected microcontroller making implementation easy and fast with virtually no need to write a single line of code. This translates to considerably lower development costs and faster time-to-market. As xPico Wi-Fi meets FCC Class B, UL and EN EMC and safety compliance, your development time is shortened. xPico Wi-Fi can reduce the overall cost of ownership compared to the competition.

xPico Wi-Fi Highlights:

- Chip-sized footprint: 24mm x 16.5mm
- Low power (6µA Standby)
- Can be operated off batteries
- IEEE 802.11 b/g/n (2.4 GHz)
- Simultaneous Soft AP and client mode
- Complete device server application with full IP Stack and web server
- Dual serial port with data rate of up to 921 kbps
- SPI with clock rate of 30MHz
- USB 2.0 full rate device mode*
- 256-bit AES Encryption
- Industrial temperature range : -40° to +85° C
- 5-Year limited warranty

LANTRONIX®
CONNECT SMART. DO MORE.™

*Software support for these features available in a future software release. Please contact sales representatives for more information.

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

> Host Interface
- Dual Serial Port, SPI, USB 2.0* (device)
- 8 GPIO

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

> Networking Capabilities
- Soft Access Point with DHCP Server
- 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

> Architecture
- ARM Cortex M3 class processor with on-chip Flash and SRAM
- 1MB Flash and 128 KB SRAM
- 1MB SPI Flash storage

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

> Physical Interface
- 40-pin Board-to-Board SMT Connector

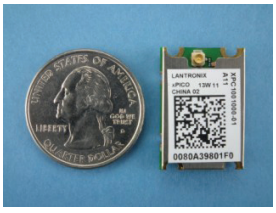
> Environmental
- Operating Temperature: –40° to +85° C
  - For operation over +70° C a thermal pad is required
- Storage Temperature : –40° to +85° C
- Relative Humidity: 0% to 90% non-condensing

> Certifications
- FCC Class B, UL and EN EMC, Japan

> Packaging
- Dimensions: 24mm (L) x 16.5mm (W) x 5.64mm (H)
- Weight: 2.5g

> Warranty
- 5-Year Limited

xPico Wi-Fi's compact form factor allows for flexible design integration with a chip-sized footprint of only 24mm x 16.5mm.



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Tablet & Smartphone enable devices

xPico WiFi provides simultaneous Soft AP and Client mode, allowing for easy points of access while maintaining a secure network without the need for special clients.

Other members of the xPico product family:

xPico Wi-Fi SMT The same functionality of the xPico Wi-Fi but in a SMT footprint. Choice of no antenna and with on module ceramic antenna available.

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

xPico IAP A chip-sized networking solution that enables Ethernet connectivity on devices for industrial and automation applications that require MODBUS support.

Ordering Information

> Part Number	> Description
XPW100100B-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
TWR-LTRX-XPWK	xPico Wi-Fi Tower Module for Freescale Tower System w/xPico Wi-Fi Module (Freescale Tower System not included)
XPC100A001-01-B	xPico Module Mounting Quick Clip Bulk pack (50 pc)
XPC100A002-01-B	xPico Module Thermal Pad Bulk Pack (50 pc)