

# LANTRONIX®

INDUSTRY:

## Connected Healthcare



### Success Highlights:

- Delivered world-class connectivity performance
- Provided high security in a compact wireless device
- Enabled the quick creation of a market-ready prototype
- Reduced total cost of development
- Reduced speed to market

### Case Study Overview:

Lantronix xPico 250 embedded Wi-Fi® and Bluetooth® Combo IoT Gateway is integral in the development of a rapid and sensitive molecular diagnostic device for detection of viruses that may cause serious illnesses. The instrument is targeted for use in a variety of settings, including hospitals and laboratories, quarantine rooms, physicians' offices, urgent care, assisted living facilities and other remote locations as needed.

“ We at Lantronix are honored to support innovative platforms that enable rapid molecular diagnostics that improve testing costs and efficiencies. ”

– Jacques Issa  
Vice President of Marketing, Lantronix Inc.

### Challenge: Find Secure Connectivity in a Small Form Factor

With the mission of reinventing how rapid molecular diagnostic capabilities are applied to a variety of applications, the team embarked on creating this testing device. In accelerating the timeline to create a prototype and deliver the analyzer to market, the developer needed to ensure that the design would be in compliance with the FDA's Emergency Use Authorization. They turned to Lantronix for an affordable and compact gateway solution with Ethernet, Wi-Fi and Bluetooth connectivity as well as WPA-2 enterprise security.



### Product:

#### xPico 250 Embedded Wi-Fi and Bluetooth IoT Gateway

Delivering seamless and secure Ethernet, Wi-Fi and Bluetooth connectivity, the Lantronix xPico 250 line of embedded IoT gateways enables OEMs to build and deploy smart connected products with reduced complexity and lower risk.

#### Product Features

- Dual-band Wi-Fi (802.11 a/b/g/n) and Ethernet
- Dual mode Bluetooth and Bluetooth LE
- Automatic network connection management
- Concurrent Soft AP + client mode for direct wireless service access
- Operation as network co-processor or wireless MCU
- Global Certification (FCC, IC, ETSI, Japan, AU/NZS, China)
- Industrial-grade design for operation in extreme environments (-40 C to +85 C)
- Remote updates and device management via ConsoleFlow™

For more information, visit <https://www.lantronix.com/products/xpico-250/>

## Solution: Lantronix xPico 250 Embedded IoT Gateway

To help create the instrument for point-of-care use, the development team chose the Lantronix xPico 250 IoT gateway. The xPico 250 IoT gateway gave the developer the secure multi-protocol connectivity solution needed for the instrument on which its molecular diagnostic device will run. It also met the size constraints for the device as well as requirements for WPA-2 Enterprise Security and support of Ethernet, Wi-Fi and Bluetooth. Upon FDA approval, the developer's molecular diagnostic assay will be manufactured for distribution globally.

## Results: A Market-Ready Prototype and Speed to Market

Utilizing the Lantronix xPico 250 Embedded IoT Gateway, the developer was able to speed up the development of its instrument design in compliance with the FDA's Emergency Use Authorization. The xPico 250 IoT gateway gave the developer a small, secure multi-protocol connectivity solution needed for its instrument. Designed to provide portable, fast and accurate molecular diagnostic testing, its purpose is to help medical professionals save lives.

### Benefits Include:

- Accelerated timeline to deliver a prototype
- Reduced total cost of development
- Faster production and time-to-market
- Compliant with the FDA's Emergency Use Authorization

“Medical device manufacturers can depend on our secure, cloud-based software ConsoleFlow and the secure multi-protocol connectivity of the xPico 250 gateway to provide the solutions needed in this demanding industry.”

– Jonathan Shipman  
Vice President of Strategy, Lantronix Inc.

## xPico 250 Series

Delivering seamless and secure Ethernet, Wi-Fi and Bluetooth connectivity, the Lantronix xPico 250 line of embedded IoT gateways allows OEMs to build and deploy their smart connected products with reduced complexity and lower risk.

### The xPico 250 Series is ideal for:



Industrial  
Automation



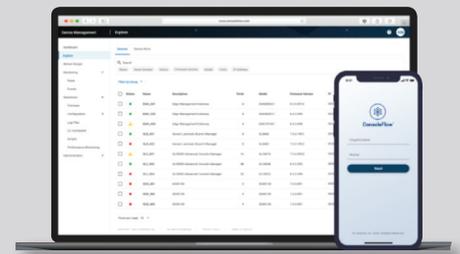
Medical  
Devices



Responsive  
Retail



Resource  
Management



## IoT Medical Applications

Lantronix offers a full solution for medical IoT applications, including hardware, software and connectivity.

Utilizing ConsoleFlow, Lantronix's cloud-based management platform, users can view and manage globally distributed assets through a single pane of glass from virtually anywhere.

Compatible with Lantronix's IoT devices and network assets, ConsoleFlow offers true Zero-Touch, which simplifies onboarding logistics of new devices, virtually eliminating on-site visits and reducing operational costs.

ConsoleFlow empowers users to focus on operational efficiency to drive successful outcomes.

For more information, visit <https://www.lantronix.com/consoleflow/>

## About Lantronix

Lantronix Inc. is a global provider of secure turnkey solutions for the Internet of Things (IoT) and Remote Environment Management (REM), offering Software as a Service (SaaS), connectivity services, engineering services and intelligent hardware. Lantronix enables its customers to provide reliable and secure solutions while accelerating their time to market. Lantronix's products and services dramatically simplify operations through the creation, development, deployment and management of customer projects at scale while providing quality, reliability and security.

**LANTRONIX**<sup>®</sup>

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