# **Case Study**

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# INDUSTRY: Industrial & Retail

#### Success Highlights:

- Deliver world-class wireless performance in challenging RF
  environments
- Quickly design and build a market-ready prototype
- Customize features using available Software Development Kit
- Reduce total cost of development
- Get into production and more quickly deliver products to market

#### **Case Study Overview:**

Lantronix xPico 240 embedded IoT Gateway hosts the Cypress CYW43907 Arm® Cortex®-R4 Dual-Band (2.4/5 GHz) 802.11n Wi-Fi® MCU to enable the leading industrial weighing scales manufacturer to more quickly design and build a market-ready prototype. The new wireless design eliminates the need for wired connectivity, giving stores the flexibility for reconfigurations on demand while information from weighing scales is wirelessly transmitted directly to the point-of-sale (POS) terminal.

<sup>66</sup> Smart wireless scales enable easy grocery store reconfigurations as well as wireless transmission of information to point-of-sale terminals, speeding customer check-out.<sup>9</sup>

- Jonathan Shipman, VP of Strategy, Lantronix

# Smart Connectivity for Industrial Weighing Scales

Increasing automation has led to the adoption of automated electronic measuring scales for a variety of industries, such as retail, healthcare, veterinary, laboratories, jewelry and other industrial applications. For example, smart scales used at grocery stores account for nearly 33 percent of the market and is growing rapidly. The industry has traditionally used serial and Ethernet hardwired solutions, which can be difficult to maintain and potentially detrimental to business fluidity.

In today's highly dynamic retail space, leading grocery chains are seeking the flexibility of wireless connectivity to enable them to do store reconfigurations on demand and wirelessly transmit information from weighing scales directly to POS terminals.





# Product: xPico 240 Embedded IoT Gateway

The Lantronix xPico 240 series of embedded IoT gateways enables OEMs to build and deploy smart connected products with reduced risk, development costs and complexity.

#### **Product Highlights**

- Dual-band Wi-Fi (802.11 a/b/g/n) and Ethernet
- Automatic network
   connection management
- Concurrent Soft AP + client mode for direct wireless service access without disrupting machine field operations
- Enabled 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<sup>™</sup>

For more information: www.lantronix.com/products/ e210-series-routers/

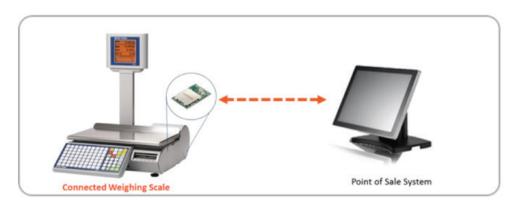
## **Challenge: Deliver Globally Certified Connectivity**

A global manufacturer of industrial and commercial weighing scales needed an industrial-grade, reliable and secure enterprise Wi-Fi solution for building commercial weighing machines to be used in diverse retail environments. They wanted a globally certified solution that would mitigate significant product validation and re-certification risks and costs in addition to implementing dependable, wireless connectivity and security.

The manufacturer turned to Cypress and its strategic ecosystem partner Lantronix, a leader in providing reliable Wi-Fi/Bluetooth® modules powered by Cypress Wireless as well as a suite of built-in-device, enterprise-grade security software.

## Solution: Lantronix xPico 240 and Cypress CYW43907

The customer selected the Lantronix xPico 240 Embedded IoT Gateway to host the Cypress CYW43907 Arm Cortex-R4 Dual-Band (2.4/5 GHz) 802.11n Wi-Fi MCU. This module provides world-class dual-band Wi-Fi, antenna diversity, Enterprise Wi-Fi security and industrial-grade wireless connectivity management, enabling rapid time to market.



## **Results: a Market-Ready Prototype**

Utilizing the Lantronix xPico 240 Embedded IoT Gateway and the Cypress CYW43907, the customer created a new industrial weighing scale design that eliminated the need for wired connectivity, giving stores the flexibility for reconfigurations on demand while information from weighing scales is wirelessly transmitted directly to the POS terminals.

# **Benefits Include:**

- Quickly build a market-ready prototype
- Reduce total cost of development
- Get to production and market faster
- Deliver a comprehensive, globally certified solution to market

<sup>6</sup> Our technologies have enabled a smart wireless grocery scale solution that gives stores more flexibility in serving their customers.<sup>9</sup>

- Andrew Hunter, Senior Director Marketing, Cypress



#### Lantronix xPico 240 Features

- Ability to host the Cypress CYW43907, providing worldclass wireless performance in challenging RF environments
- Pre-loaded firmware that includes secure wireless network connectivity options with InfiniShield® suite
- Available Software Development Kit (SDK) that enables customization and development of unique features as required
- Compact footprint with global certifications

# About Lantronix

Lantronix, Inc. is a global provider of hardware and software solutions for the Internet of Things (IoT) and Out-of-Band Management (OOBM). Lantronix's solutions are deployed inside millions of machines at data centers, offices, and remote sites serving a wide range of industries, including energy, agriculture, medical, security, manufacturing, distribution, transportation, retail, financial, environmental, and government.



(800) 422-7055 • sales@lantronix.com lantronix.com