



End-Device Certified LPWA and Bluetooth 5 Modem from Laird Connectivity Enables Rapid Deployment of IoT Edge Applications

Laird Connectivity customers needed to bridge wireless Bluetooth 5 sensor data to cloud services via a low-power LTE connection. The company's new Pinnacle™ 100 cellular modem and Sentrius MG100 gateway include the Sierra Wireless HL7800 LPWA module, enable OEMs to reduce risk and decrease the development time of new IoT applications.

QUICKFACTS

Company

Laird Connectivity
www.lairdconnect.com

Customer Profile

Laird Connectivity simplifies and enables wireless technologies with market-leading wireless modules and antennas, integrated sensor and gateway platforms, and customer-specific wireless solutions. The company's best-in-class support and comprehensive engineering services help customers reduce risk and improve time-to-market.

Objectives

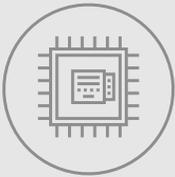
Develop pre-certified multi-wireless modem and gateway solutions to bridge wireless Bluetooth 5 sensor data to cloud services via a low-power LTE connection to enable customers to develop IoT edge applications quickly and cost-effectively.

Results

- Pinnacle™ 100 offers OEMs a pre-certified low-power module for IoT edge applications
- Sentrius MG100 offers customers a gateway solution
- Customers can reduce development time and costs by avoiding costly cellular certification, cloud integration and antenna testing

Sierra Wireless Products and Services

- HL7800 LPWA module



“Laird Connectivity selected the Sierra Wireless HL7800 series embedded module which provides access to global low-power wide-area cellular service and GPS location services support in an ultra-low power, compact form factor.”

Jonathan Kaye,
Senior Director of Product
Management, Laird Connectivity

BUSINESS CHALLENGE

The Internet of Things (IoT) is increasing demand for extended network coverage, low-power consumption, and the capacity to accommodate thousands of connected devices. Integrating connectivity is a challenge for many customers and can be time-consuming and expensive to achieve certification with network operators.

While Laird Connectivity has many years of experience developing Bluetooth 5 and other wireless solutions, the company recognized that its customers needed a solution that could bridge wireless Bluetooth 5 sensor data to cloud services via a low-power LTE connection. The company set out to develop a multi wireless solution that could not only be end-device certified, but also a fully integrated Bluetooth 5 SoC with Cortex M4F MCU and internal & external antenna options so that customers could develop and deploy their IoT edge applications quickly and cost-effectively.

SIERRA WIRELESS AirPrime® SOLUTION

The Pinnacle™ 100 cellular modem is an out-of-the-box embedded socket modem designed for OEMs to reduce risk and decrease the development time of new IoT applications. The product intelligently combines low-power LTE-M/NB-IoT cellular with long-range Bluetooth 5 wireless connectivity. This combination is ideal for battery-powered devices operating at the edge of IoT networks where customers need to bridge wireless sensor data to cloud services over a low-power LTE connection.

The Pinnacle 100 is ideal for customers with remote and/or long-range applications that need to gather actionable IoT intelligence and send it to the cloud. Providing a solution which incorporates all the wireless connectivity means that customers can add low power cellular to their products without needing to do costly cellular or co-located regulatory certifications, antenna selection and testing, cloud integration, and other wireless development. The Pinnacle 100 is the only cellular solution on the market to have pre-integrated, low-cost embedded and external antenna options, including Laird Connectivity's Revie Flex. Customers have the advantage of working with one partner in order to leverage free antenna scans, design reviews, on-site EMC support, and a global support team of engineers.

“Sierra Wireless provided us with a unique LPWA solution that provides first-rate LTE-M/NB-IoT and the Sierra team played a critical role in helping us through the development of this product.”



Jonathan Kaye, Senior Director of Product Management, Laird Connectivity

By developing with a socket modem, customers significantly reduce development time and avoid extensive certification costs. The Pinnacle 100 is end-device certified with FCC, ISED, CE, PTCRB, GCF, AT&T and Verizon, and includes pre-integration with AWS Cloud. It offers the option to develop applications using the onboard MCU via Zephyr RTOS. The out-of-the-box Development Kit (DVK) allows customers to seamlessly evaluate the product. It is equipped with standalone Bluetooth 5 environmental sensors configured to send data to the AWS Cloud over LTE-M, a complimentary SIM card with a monthly data plan, and a companion smartphone app for provisioning.

With its unique combination of features, the Pinnacle 100 enables new use cases in cold chain monitoring, smart cities, agriculture, industrial heating and cooling, predictive maintenance, connected field services and the medical industry.

RESULTS

“With the Pinnacle 100 and Sentrius MG100, we are simplifying the enablement of wireless technologies with market-leading wireless modules and antennas for our customers. The combination of this unique product with best-in-class support and comprehensive engineering services will ensure that our customers can get to market more quickly, and more cost-effectively,” said Jonathan Kaye, Senior Director of Product Management, Laird Connectivity.

“By selecting the Sierra Wireless HL7800 for both the modem and gateway products, we were able to reduce time to market, overall cost burden and certification costs. We shared codebases between the two platforms and reused code where appropriate,” explained Mr. Kaye.

About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy. Customers Start with Sierra because we offer a device to cloud solution, comprised of embedded and networking solutions seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide rely on our expertise in delivering fully integrated solutions to reduce complexity, turn data into intelligence and get their connected products and services to market faster. Sierra Wireless has more than 1,300 employees globally and operates R&D centers in North America, Europe and Asia.

For more information, visit www.sierrawireless.com.

Connect with Sierra Wireless on the IoT Blog at www.sierrawireless.com/iot-blog, on Twitter at [@SierraWireless](https://twitter.com/SierraWireless), on LinkedIn at www.linkedin.com/company/sierra-wireless and on YouTube at www.youtube.com/SierraWireless

Sierra Wireless, the Sierra Wireless logo, AirPrime, AirLink, AirVantage and the red wave design are trademarks of Sierra Wireless. Other registered trademarks that appear on this brochure are the property of the respective owners. © 2017 Sierra Wireless, Inc. 2021.04.22