Sentrius™ RG1xx Gateways

LoRaWAN-enabled Gateway with 802.11a/b/g/n Wi-Fi and BT 4.0

YOUR PRIVATE INDUSTRIAL IOT PLATFORM. CLOUD-READY ON DAY ONE.

New: IP67 certified enclosures with mounting hardware available!

Laird Connectivity's **Sentrius™ RG1xx Series** LoRaWAN-enabled gateway is the ultimate in secure, scalable, robust LoRaWAN solutions for end-to-end control of your private LoRaWAN network. Leveraging our field-proven, reliable WB50NBT wireless bridge certified module, it also offers enterprise **dual-band Wi-Fi, BT v4.0 (BLE and Classic) and wired Ethernet** for complete design freedom. Based on the **Semtech SX1301/SX1257 chipset designs**, it offers a **LoRaWAN range up to 10 miles** and pre-loaded **LoRa Packet Forwarder software**, perfect for highly scalable, flexible IoT networks. The Sentrius RG1xx Gateway **works with our RM1xx certified modules and RS1xx Series sensors** for simple out-of-the-box integration. It is compatible with 3rd party Cloud and LoRa partners, as well as any LoRaWAN certified client devices. Laird Connectivity's Sentrius RG1xx Series Gateway gives you multi-protocol connectivity to your long-distance IoT sensors and devices to create actionable IoT intelligence.

- **Full Linux operating system** – Kernel v4.x running on Atmel A5 Core @ 536 MHz
- **Multiple interfaces** such as LoRaWAN, 802.11a/b/g/n, Bluetooth v4.0, and Ethernet
- **8-Channel LoRaWAN support** with up to +27dBm max transmit power
- **Comprehensive Certifications** for FCC / IC / CE
- **Industrial temperature range** (-30º to 70º C)
- **Advanced deployment tools** including intuitive web-based configuration, and integrated presets for multiple external LoRa Network Server vendors
- **Enterprise-grade security** built on our years of experience in wireless
- **Industry-leading support** works directly with our engineers to help deploy your design

FEATURES AT A GLANCE

AGGREGATE AND UTILIZE IOT DATA

Develop a fully-owned private LoRaWAN network to capture, route, and process IoT data for your application.

MULTIPLE INTERFACE OPTIONS FOR ULTIMATE DESIGN CHOICE

Wide variety of connectivity interfaces: LoRaWAN, Dual Band Wi-Fi (2.4 & 5GHz), Ethernet and BT v4.0 (BLE and Classic – not implemented in GA1).

COMPREHENSIVE SECURITY AND RELIABILITY

Robust multi-layer security at each interface to safeguard your network at every level.

BROAD CERTIFICATION AND APPROVALS

Fully certified for FCC, IC, and CE, and Bluetooth SIG listing.

PLATFORM FOR BUILDING ACTIONABLE IOT INTELLIGENCE

Route sensor data to the Cloud with our integrated LoRa Packet Forwarder software for simple application deployment

PERSONAL SUPPORT FOR YOUR IMPLEMENTATION

Partner with Laird Connectivity's Tier 2 support and engineering to help configure and deploy your application.

APPLICATION AREAS

- Smart Metering and Remote Sensing
- Industrial Automation/Monitoring and Control
- Agricultural and Rural IoT / M2M Applications

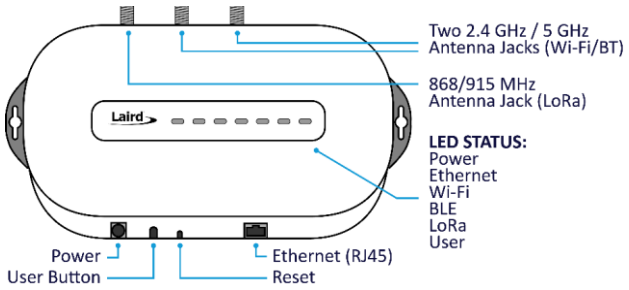
Interested in Laird's Sentrius™ RG1xx Gateways?
Contact us at **https://connectivity.lairdtech.com/rg1xx-series**

Shared Specifications

Category	Feature	Specification
Chipset	LoRa®	Semtech SX1301/1257
	Bluetooth®	Cambridge Silicon Radio CSR8811 A08
	Wi-Fi	Qualcomm Atheros QCA6004
Wireless Characteristics	Wi-Fi Spatial Streams	2x2 MIMO
	Wi-Fi Frequencies	2.4 and 5GHz Operation
	LoRa Frequencies	863 – 870 MHz (EU), 902 – 928 MHz (US)
Interfaces	Wired	Ethernet - RJ45 Connector
	Wireless	LoRaWAN, Wi-Fi 2.4 / 5GHz, Bluetooth v4.0 (BLE and Classic)
Power	Supply Voltage	12V / 1A
	Power Adapter	External DC Power Supply with regional plug adapter
Security	Wi-Fi	Standards - WEP, WPA, WPA2. Encryption – WEP, TKIP, AES EAP Types - EAP-FAST, EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAP, PEAP-MSCHAPv2, PEAP-TLS, LEAP
Software	Operating System	Embedded Linux, 4.x Kernel
	LoRa	Packet Network Forwarder with default support for The Things Network, Stream Communications, Loriot
	Configuration	Web-based interface via Ethernet / Wi-Fi
Physical	Dimensions	133 x 275 x 30 mm
Environmental	Operating Temp.	-30° to +70°C
Regulatory	Approvals	FCC, IC, CE
Accessories	Included	One 868 MHz or 915 MHz antenna, two 2.4 /5 GHz antennas, External DC Power Adapter, Ethernet cable
Enclosure	Standard	Moulded Plastic Housing
	Option - IP67 Enclosure	Optional IP67-rated external enclosure housing for main gateway PCB
Warranty		1-Year Warranty

For full specifications on RG1xx Gateways, please see the RG1xx User Guide.

Connector Diagram (Standard RG1xx)



Ordering Information

Part	Description
RG191	Intelligent LoRaWAN 915MHz Gateway including Wi-Fi, BT, and Ethernet – US Accessory Kit
RG186	Intelligent LoRaWAN 868MHz Gateway including Wi-Fi, BT, and Ethernet – EU Accessory Kit
455-00028	Intelligent LoRaWAN 868MHz Gateway including Wi-Fi, BT, and Ethernet – UK Accessory Kit
450-0190	Sentrius™ RG186 Gateway including LoRaWAN, Wi-Fi, Bluetooth & Ethernet - IP67
450-0191	Sentrius™ RG191 Gateway including LoRaWAN, Wi-Fi, Bluetooth & Ethernet - IP67
690-1002	Pole Mount Bracket - Accessory for 450-0190 or 450-0191
690-1003	Wall Mount Bracket - Accessory for 450-0190 or 450-0191

Стандарт Электрон Связь

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Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

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Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

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С нами вы становитесь еще успешнее!

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