SECURE WIRELESS GATEWAY – A POWERFUL IOT PLATFORM.

Laird Connectivity's IG60, based on the Microchip SAMA5D36 processor, brings all of our industry competence and capabilities into one solution. Send and receive device data via serial (RS232/422/485), dual-Ethernet, USB, SD micro, Bluetooth, and Wi-Fi.

The gateway provides superior enterprise-class Wi-Fi connectivity with full support for 2x2 MU-MIMO 802.11ac WLAN, plus Bluetooth 4.2 dual-mode. This solution is equipped with a Cortex A5 applications processor, wireless and wired connectivity, enterprise-grade security, and comprehensive Linux board support package (BSP).

The IG60 is the ideal gateway for applications that require superior connectivity. Containing the 60 Series module and Summit Software Stack, the IG60 provides superior wireless connectivity in harsh RF environments. The compact form factor and variety of interfaces allow the IG60 to be used as a wireless bridge, main processing unit, or IoT gateway.

- **Improved Wi-Fi Performance –** 2x2 MIMO 802.11ac Wi-Fi supports more robust wireless connections via additional spatial streams
- **Onboard cryptographic engine** which supports FIPS 140-2 Level 1, meeting FIPS requirements with minimal performance impacts
- **Chain of Trust Architecture** – Our hardware root-of-trust tools provide layers of security to mitigate attacks
- **CVE Checking and Penetration Testing** – We monitor and patch for worldwide vulnerabilities and look for new vulnerabilities, and pass down improvements via software releases
- **Reduced Time-to-Market –** Use the IG60 as your platform for a fully-featured finished product
- **Fully Featured Development Tools –** Start from our pre-compiled images or from source. Includes our BSP, Eclipse IDE support, and SDK

FEATURES AT A GLANCE

CONNECTIVITY AT THE CORE
The IG60 is designed with connectivity at the core; including Wi-Fi, Bluetooth, Dual-Ethernet, RS-232/422/485 Serial, USB, and an SD micro slot.

SIGNED AND SECURED AT EVERY LAYER
Our Chain of Trust Architecture creates secure modules, running approved software, with secured file systems.

THE FULL POWER OF THE SUMMIT SOFTWARE STACK
The stack provides superior performance in harsh environments, with faster channel scanning, 15x faster roaming, and 50% more consistent roaming when compared to other radios.

GATEWAY AS A PLATFORM FOR FASTER TIME TO MARKET
The IG60 can serve as the main platform for your product, providing a feature rich base and speeding your design to market.

GLOBAL CERTIFICATIONS
Regulatory compliance for FCC, IC, CE, as well as UL hardware certification and Bluetooth SIG Qualification.

INDUSTRY-LEADING SUPPORT
Our Tier 2 and FAE support bring expert assistance to your integration, working with you and Laird engineering to reduce your time to market.

APPLICATION AREAS

Healthcare and Medical Devices

IoT Bridging / Gateways

Industrial Environments

Shared Specifications

Modular SoM Core	MPU	Atmel/Microchip SAMA5D36 Cortex
	Wireless Interface	Marvell 88W8997/88PG823
	RAM	256 MB LPDDR RAM
	Flash Storage	512 MB NAND Flash
External Interfaces	Serial	1x DB9 RS232/422/485 w/ 1.5 KV isolation
	Ethernet	1x 10/100 Mbit/s 1x 10/100/1000 Mbit/s with IEEE 1588
	USB	1x USB 2.0 Host
	SD Card	1x MicroSD slot (SDHC, SD Card 2.0) for additional external storage
	Antenna Port	2x SMA Connector
Wireless Interfaces	Wi-Fi	802.11ac with 2x2 MU-MIMO
	Bluetooth	Bluetooth 5 (LE Coded PHY coming soon)
	LTE	Cat-1 LTE (coming soon)
Security	Standards	WEP, WPA, WPA2
	Dynamic	802.1X Extensible Authentication Protocol Types (EAP-FAST, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP)
	Chain of Trust Architecture	Secure boot, hardware root-of-trust, encrypted file systems, cryptographic accelerator
Software	Operating System	Laird Linux Kernel v4.19
	Development Tools	Precompiled SDK, toolchain, and development images Support to build your own image or SDK Host Communications API Eclipse IDE Support
	Radio Management	Laird Connection Manager, Web API
Physical	Dimensions	85 mm x 22 mm 100 mm
Contents	Box Contents	DIN-rail and wall mount bracket, power adapter, serial loopback adapter, 2x SMA antennas
Environmental	Operating Temperature	-30° to +85°C (-22° to +185°F)
	Relative Humidity	0-95% Non-condensing
	Mounting	DIN-rail or wall mount
Electrical	Input Voltage	9-30 V DC
Certifications	RF Approvals	FCC / IC / CE (pending)
	Hardware	CE, UL/IEC62368-1 (pending)

For full specifications on the IG60, please see the IG60 datasheet.

ORDERING INFORMATION

Part	Description
455-00006	Sentrius™ IG60 Gateway Starter Kit with Laird Linux Software Build