60 Series Modules
802.11ac & 2x2 MIMO Wi-Fi + Bluetooth Smart Ready v5.1

Laird™ CONNECTIVITY

ROBUST, SECURE, & FUTURE-READY FOR **YOUR** APPLICATIONS

Powered by the powerful Marvell 88W8997 chipset, Laird Connectivity's 60 Series Wi-Fi + Bluetooth modules achieve the best possible connectivity and performance in any RF environment. With industry-leading software, broad OS support*, and multiple form factors, Laird Connectivity's 60 Series offers flexibility to meet your needs. The 60 Series introduces 802.11ac, 2x2 MIMO, Bluetooth 5.1 and Bluetooth 5 ready hardware on one low-power module, delivering future-ready cutting edge technology for your product. Building on the security and robustness inherited from Laird's expertise in its 40, 45, and 50 Series modules means ultra-high data rates, improved performance, and the most reliable wireless in crucial applications such as medical and industrial.

- **New Wireless Capabilities:** Advanced 802.11ac, 2x2 MIMO, Advanced Power Save, Optimized Internal Bluetooth/ Wi-Fi Coexistence, Fast Roam
- **New Form Factors:** Extremely small 14 mm x 13 mm SiP module and M.2 2230-E module
- **Bluetooth 5.1:** Enables Classic Bluetooth and Low Energy mode with latest security and throughput enhancements, all on Bluetooth 5 ready hardware
- **Pre-calibrated for performance**: Tuned in manufacturing

Features at a Glance

BRING WI-FI + BLUETOOTH TO EVEN MORE DEVICES
60 Series modules are supported on Linux® and Android™*

REDUCED POWER CONSUMPTION
28 nm process technology results in significant power savings over competitive radios

CONNECT AT ULTRA-HIGH DATA RATES
With 802.11ac and 2x2 MIMO, 60 Series can achieve data rates up to 866 Mbps

ALWAYS CONNECTED, EVEN IN THE HARSHEST CONDITIONS
802.11r + CCKM* support for rapid roaming and 2x2 MIMO for improved performance and reliability

MULTIPLE FORM FACTORS TO SUIT DIVERSE NEEDS
Available as a SiP or M.2 (USB or SDIO) form factors

ROBUST SECURITY FOR ENTERPRISE DEMANDS
Full list of security standards and EAP types*

BROAD CERTIFICATION AND INTERNATIONAL APPROVALS
Certifications and approvals for FCC (USA), ISED (Canada), EU (Europe), KC (Korea), MIC (Japan), RCM (AUS/NZ)

PERSONAL SUPPORT FROM DESIGN TO MANUFACTURE
Industry-recognized integration and support organization dedicated to reducing your time to market

60 Series Product Family

Laird's 60 Series is comprised of two classes of modules to give you flexibility in your wireless design:

Sterling 60
Professional grade connectivity with leading edge wireless technology

Summit 60
Most secure and robust wireless connectivity option for demanding Enterprise applications
Summit 60 only

Application Areas

Connected hospital/ Medical devices

IoT bridging/Cable replacement

Industrial/AIDC

Configuration Options

60-SIPT
SiP Module

- Featured on each 60 Series variant
- SDIO, USB, and PCIE options
- 14 mm x 13 mm x 1.7 mm

Small and customizable

60-2230C
USB or SDIO Module

- Popular low-profile M.2 form factor (2230 E-key)
- Choose from USB or SDIO interface options
- 22 mm x 30 mm x 3.3 mm

Widely adopted form factor, easier integration

Key Specifications

Category	Feature	Specification
Chipset	Silicon Technology	Marvell 88W8997 Chipset – Wi-Fi + Bluetooth combination module with optimized internal Wi-Fi/Bluetooth coexistence and latest-gen process technology for ultra-low power
Interfaces	Logical Interfaces	USB, SDIO, or PCIE (Wi-Fi), UART, SDIO, or USB (Bluetooth)
RF Performance	Antenna Options	Pin access (60-SIPT). 2x U. FL (60-2230C)
Environmental	Operating Temp/Humidity	-30°C to 85°C (-22°F to 185°F). 10 to 90% humidity (non-condensing)
Wi-Fi	Operating Frequency	2.4 GHz to 2.495, 5.15 GHz to 5.825 GHz (including DFS)
	Regulatory Domains	FCC, ISED, EU, KC, MIC, RCM
	Wi-Fi Media	DSSS, CCK, OFDM
	Wi-Fi Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
	Wi-Fi Standards	IEEE 802.11ac, 802.11d, 802.11e, 802.11h, 802.11i, 802.11r
Bluetooth	Standards	Bluetooth v2.1 with EDR, Bluetooth 5.1 (Bluetooth Low Energy) ** Includes features anticipated in the Bluetooth 5.0 specification
Software	Operating Systems Supported	Linux and Android
Security	Standards	WEP, WPA, WPA2-Personal, WPA2-Enterprise, WPA3-Personal, WPA3-Enterprise
	Encryption	WEP, TKIP, AES
	Supported EAP Types	EAP-FAST, EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, PEAP-TLS, LEAP
Certifications	Applicable Certifications	Bluetooth SIG Qualification

For full specifications on 60 Series modules, please see the appropriate datasheet at:

https://www.lairdconnect.com/wireless-modules/wifi-modules-bluetooth/60-2230c-series-bluetooth-and-wifi-module

https://www.lairdconnect.com/wireless-modules/wifi-modules-bluetooth/60-sipt-bluetooth-and-wifi-module