

## **Summit Suite - Secure Connectivity**

Feature-Rich Enterprise Wi-Fi Connectivity

## HARNESS THE FULL WI-FI POTENTIAL OF LAIRD CONNECTIVITY MODULES





The Summit Suite Secure Connectivity is an enterprise-grade software suite that unlocks the full Wi-Fi potential of the Summit 60, 60 Series SOM, IG60, and Summit SOM 8M Plus product familes. As enterprise Wi-Fi network security evolves from using the current industry standard WPA2-Enterprise and TLS 1.2 to the next generation WPA3-Enterprise and TL 1.3, Laird Connectivity has been working to create Wi-Fi software that stays ahead of this industry trend.

In addition, Laird Connectivity understands that each Wi-Fi environment is different. Laird Connectivity has taken careful considerations into the configurability and feature enhancements of our products that include Wi-Fi to ensure that devices deliver peak performance. The Summit Suite Secure Connectivity includes optimizations that reduce channel scan times and provides faster and more consistent roaming when compared with other radios.

Let Laird Connectivity's support and engineering experts speed your design to market with our most comprehensive feature set to date.

- Custom Wi-Fi Firmware On select products, Laird Connectivity firmware engineers have improved Wi-Fi stability and fully integrated with the rest of the stack to improve scanning, roaming, powers, and channels.
- Adaptive World Mode On select products Ship a single SKU worldwide and maintain regulatory compliance in client mode operation. Our custom FCC approved regulatory application works with our customized drivers and firmware to discover what country your device is operating in and use the highest TX powers and maximum channel set.
- Laird Connectivity Wireless Supplicant Hundreds of bug fixes above open-source supplicant, with significant security and authentication enhancements and vastly improved roaming functionality. Supports latest WPA3-Personal, WPA3-Enterprise, and WPA3-Enterprise CNSA/Suite B 192-bit mode on select products.
- Upgraded Connection Manager Our customized version of NetworkManager allows for advanced configurable scan/roam parameters, channel masking, and middle certificate support in conjunction with all underlying stack layers.

### FEATURES AT A GLANCE



#### **WIRELESS FOR HARSH ENVIRONMENTS**

Laird Connectivity's Summit Suite brings reliable wireless to applications and environments where connectivity is a must.



#### IMPROVED AND OPTIMIZED SUPPLICANT

Our customized wireless supplicant brings more stability, security, and reliability to your wirelessly enabled devices.



## ENDLESSLY CUSTOMIZABLE TO YOUR NEEDS

Every RF environment is different. Customize with channel masking to simplify scans, tweak roam triggers, reconnects, and authentication settings.



#### SLEEP WHEN INACTIVE AND SAVE POWER

Wake-on-Wireless lets your device sleep until wireless traffic is sent to your device, greatly reducing power consumption.



#### ADAPTIVE WORLD MODE FOR EASIER DEPLOYMENT

Adaptive World Mode lets you deploy one SKU anywhere in the world and optimize radio power based on local regulatory domain.



#### INDUSTRY-LEADING SUPPORT

Our Tier 2 and FAE support bring expert assistance, working with you and our engineering to reduce your time to market.

## **APPLICATION AREAS**



Interested in the Summit Suite?
Visit us at www.lairdconnect.com/summit-suite

**Medical Devices** 



# **Direct Comparison**

Category	Feature	Summit 60	8M Plus / 60 SOM / IG60	Specification
ENHANCED SCANNING AND ROAMING	802.11k, 802.11v	х	х	Allows infrastructure topology and loading information to be shared with the client to improve client roaming and battery performance and overall better network performance
	802.11r (Optimized)	х	х	Enhancements and fixes to 802.11r to improve fast roaming
	Channel Masking	х	х	Decreases the number of channels scanned by client radio
	Configurable Scan Timing	х	х	Configure the interval at which a radio scans for new APs
	Configurable Roam – Trigger, Delta, Threshold	х	х	Configurable parameters to control the radio's roaming behavior
	DFS Enable/Disable	x	x	Enable or disable passive scanning on DFS channels
ENHANCED STABILITY	Automatic Detection of OPMK/SMPK	х	х	Automatically determines WPA/WPA2 key caching
	Improved OPMK/PMKID Support	х	х	Optimizes the handling of key caching for WPA and WPA2 networks
	Suppress Broadcast Scanning – Specific SSID	х	х	Improves spectrum efficiency
	TLS Improvements	Х	X	Interoperability improvements for TLS
IMPROVED SECURITY	Fast Start-up Connections	x	х	Allows a client to connect to an infrastructure without re-authenticating – reducing the time needed to connect to an AP
	Configurable Authentication Timeout	х	х	Faster connection recovery when the infrastructure drops an EAP authentication or helpful for customers who require longer authentication times
	Full EAP-FAST Support	Х	X	Enhanced security with full EAP-FAST support
	Middle CA Certificate Support	Х	X	Enhanced security for networks utilizing middle certificates
	FIPS 140-2/FIPS 140-3 Support		X	FIPS 140-2/FIPS 140-3 support
	Configuration of Multiple phase2 Methods for EAP Authentication	x	х	Allows connections to radius server using unknown phase2 methods
	802.11 w/i/e	Х	X	Added Security and QoS
	TLS 1.3 Support	Х	X	Latest security standard for TLS (Transport Layer Security)
	WPA3-Personal	Х	X	Upgraded security for individual users on non-enterprise networks
	WPA3-Enterprise	Х	X	The latest security standards for enterprise networks
	WPA3-Enterprise CNSA/Suite B 192-bit mode		х	Increased cryptographic strength for highly sensitive enterprise networks
REGULATORY	Future Regulatory Updates	Х	х	Ensures regulatory compliance for the life of the radio
	Adaptive World Mode	х	х	While in client mode, ship 1 SKU and the stack optimizes the radios' power output and channel set to the best operation for each supported r regulatory domain including FCC.
	Adaptive World Mode Lite	х	Х	While in access point mode, ship 2 SKUs, one for FCC and one for the rest of world. The FCC SKU is optimized for FCC, while the rest of world SKU optimizes the power output and channels set to the best possible for all other regulatory domains.
	Antenna Gain Adjustment	Х	х	Allows a reduction in the radio's transmit power to allow customers to use antennas other than those on our certified antennas list
	Custom Power Tables	Х	х	Allows generation of power tables for uncertified countries to meet regulatory requirements for customer devices
CONNECTIVITY	BT Wi-Fi Co-existence	Х	Х	Optimizes connectivity when Wi-Fi and Bluetooth operate simultaneously
	SISO	Х	Х	Single Antenna Support – for customers who want to save power using a single antenna

# Summit Suite – Secure Connectivity Product Brief



Category	Feature	Summit 60	8M Plus / 60 SOM / IG60	Specification
	MIMO	х	Х	Multiple antenna, multiple stream support – for customers who want maximum RF performance
	SoftAP Mode	х	Х	Allows radio to operate like an access point
	Wi-Fi Direct	х	Х	Allows two clients to connect without an AP (update for Ad-Hoc)
	Concurrent AP/STA Mode	х	Х	Allows the radio to operate like an access point while maintaining a client connection to another AP
	Multiple BSSID Mode	х	Х	Allows the radio to support multiple BSSID's in AP mode
	Ad-hoc Support	х	Х	Point-to-point communications
POWER MGMT	Wake-on-Wireless (Wi-Fi [SDIO]/BT [UART])	х	х	Allows the customer to keep a device asleep until it receives an intended packet. This reduces overall power consumption
	IEEE_PS/Deep Sleep (Reduced current consumption)	х	х	Reduces power consumption when the radio sleeps
	Directed Multicast Support	Х	Х	Allows client to sleep for longer, extending the battery life
SPECIAL FEATURES	Monitor Mode	Х	Х	Connected to an AP, collects all wireless traffic between radio and AP
	Promiscuous Mode	Х	Х	Not connected to an AP, captures all wireless traffic from everything on a given channel