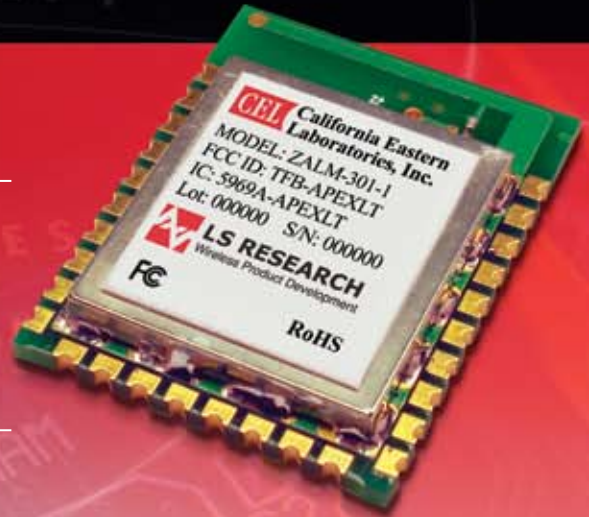


CALIFORNIA EASTERN LABORATORIES

Apex LT ZALM-301 Series

ZigBee Pro-Ready Modules



APEX LT FEATURES:

- ▶ 100 mW Power Amplifier
- ▶ 4000ft+ Line of Sight Range
- ▶ Integrated Inverted-F PCB Antenna
- ▶ 16 RF Channels
- ▶ Small Form Factor: 25.4x32.4 mm
- ▶ Supported by *InSight Desktop*
- ▶ FCC, IC, CE Certified

SPECIFICATIONS:

- ▶ Frequency: 2400 to 2483.5 MHz
- ▶ Data Rate: 250 Kbps
- ▶ Security: 128 bit AES
- ▶ Sensitivity: Up to -98dBm
- ▶ Power Consumption:
 - Transmit: 170 mA @100mW
 - Receive: 37 mA (MAX)
- ▶ Deep Sleep Current: 5 uA (Max)
- ▶ Voltage Input: 2.1V to 3.6V

MODELS

Part No.	Power Out	Antenna	Eval Kit
ZALM-301-1	100mW	Integrated PCB	ZAXM-201-KIT-1
ZALM-301-1C	100mW	MMCX Connector	

Long Range Performance

Apex LT Modules provide a self-contained, easy-to-use IEEE 802.15.4/ZigBee radio transceiver. Based on the Ember™ EM260 Network Processor, they feature an onboard 100mW Power Amplifier and can deliver over 4000 feet of range. Designed to receive data and instructions from a host microcontroller, *ZigBee Pro* stack overhead can be downloaded directly into the Apex LT module, making it easy to integrate ZigBee functionality into your wireless system.

Apex modules feature an integrated inverted-F PCB antenna or can be ordered with an optional MMCX connector to support an external antenna. They're also FCC, IC, and CE certified, eliminating the need for a costly, time-consuming certification process.

Apex Modules are unique in that they deliver the same long range performance over their entire 2.1 to 3.6V voltage input range. This helps ensure consistent performance over the life of the battery.

California Eastern Labs + LSR Research

CEL has over 45 years design and product development experience, while LSR is an acknowledged leader in RF hardware and software development. LSR's

Certification Center completes the compliance process for these products and provides safety certifications. LSR's design and development strengths are a perfect compliment to CEL's sales, marketing, customer support, and global supply chain expertise.



Worldwide Acceptance
FCC (U.S.A.), IC (Canada), CE (Europe)

Systems that contain the Apex Modules inherit the LS Research certification. Contact LS Research for a complete list of government agency approvals.



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