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F8913C-BA ZigBee Module TECHNICAL SPECIFICATION

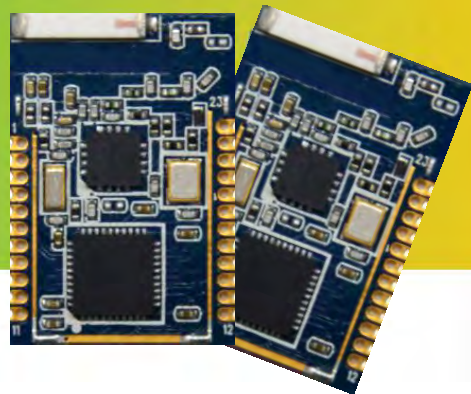
General

F8913C-BA zigbee module support ZigBee Home Automation Profile, Built-in High performance chip antenna.

F8913C-BA provide interconnection with other HA devices and convenience to get quick access to Zigbee HA for traditional vendor.

Smart Home ZigBee Module

F8913C



Product Feature

Compatible with SmartHome Standard

Support ZigBee Home Automation/ZigBee Light Link Profile.

Built-in High performance chip antenna.

Miniature package

Adopt a miniature package and the weight is only 2g, Convenient to embed in a variety of smart home devices.

High-performance radio ability

High-performance radio ability penetrated different kinds of walls and steel-door.

Long-distance communication

Support multihops of data packets and convenient to make large network, the RF Line-of-Sight Range reaches 2000m.

Product Specification

F8913C Model Sheet

Model	Content
F8913C-BA	Built-in High performance chip antenna ZigBee module

ZigBee Parameter

Item	Content
MCU	Industrial ZigBee Platform
Communication Protocol and Band	IEEE 802.15.4 ISM2.4~2.5GHz
Indoor/Urban Range	90m
Outdoor/RF Line-of-Sight Range	500m
Transmit Power	100 mW (+20dBm)
RF Data Rate	250Kbps
Receiver Sensitivity	-93dBm
Network Topologies	Point-to-Point, Point-to-Multipoint and Mesh
Channels	11 to 26

Interface Type

Item	Content
Antenna	Chip antenna, impedance 50 ohm
Package	Support half-hole for SMT and 1.27mm spacing through-hole pins simultaneous

Power Input

Item	Content
Recommended Power	DC 3.3V/0.5A
Working Voltage	DC 2.8~3.6V@21dBm

Power Consumption

Working States		Power Consumption (typical value)
F8913C	RX Mode	28~30mA@3.3VDC
	TX Mode	41.2~42.5mA@3.3VDC, (Max-Pulse-Current ≤230mA)
	Timing wake up	1.0~1.5uA@3.3VDC
	Deep Sleep	0.3~0.5uA@3.3VDC

Physical Characteristics

Item	Content
Dimensions	25x17x2 mm
Weight	2.0g

Environmental Limits

Item	Content
Operating Temperature	-40~+85°C (-40~+185 °F)
Storage Temperature	-40~+125°C (-40~+257°F)
Operating Humidity	95% (unfreezing)