DiZiC DZ-ZB-Sx RF Module

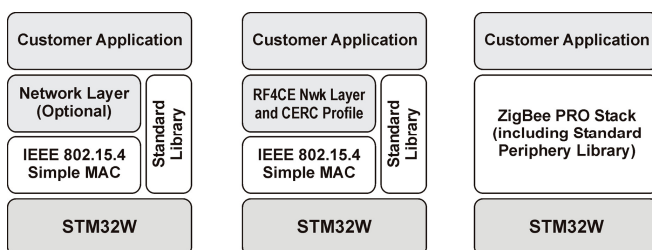*High performance Zigbee / IEEE 802.15.4 modules*

ZigBee-Compliant and Ready to Use

Quickly add wireless networking capabilities to your products with this ready-to-use ZigBee-compliant DiZiC 802.15.4 Standard RF Module. Simple to operate and highly configurable, this RF Module is ideal for applications that require long battery life, low power consumption, exceptional RF performance, and powerful 32 bit processing performance.

Small Form Factor – At only 19 mm by 25 mm, this small form factor module with enhanced EMI protection through metal shielding.
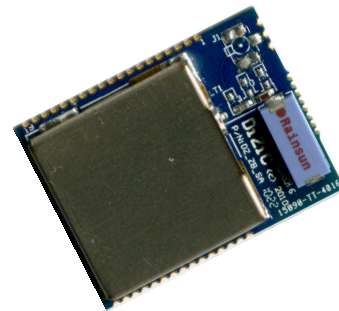
Versatile Protocole Stack Options

Select either the EmberZNet PRO ZigBee stack, an RF4CE stack, or a low level PHY / MAC stack. EmberZNet PRO is an easy to use ZigBee platform for complex mesh networks. RF4CE (Radio Frequency for Consumer Electronics) is a new protocol for consumer remote controlled equipment. The simple to use low footprint PHY/MAC API library allows custom applications to be developed on top of this stack.

STM32W RF Module Standard version DZ-ZB-SAZ

IEEE 802.15.4 SoC STM32W – The DZ-ZB-S Module uses the fully integrated STM32W System on Chip. This chip includes a 2.4 GHz IEEE 802.15.4 compliant radio, a 32-bit ARM® Cortex™-M3 microprocessor, Flash and RAM memory, and peripherals of use to designers of ZigBee-based systems.

KEY FEATURES

STM32W108 ZigBee / IEEE 802.15.4 SoC
• 32-bit ARM Cortex-M3 processor
• 128 kB of Flash and 8 kB of SRAM
• JTAG / SWD (programming and debugging)
• 2.4 GHz ISM supporting 16 channels
• Data rate up to 250 kbit/s
• 128-bit AES encryption

Peripherals
• 24 GPIOs, SPI, USART, and I2C
• 12-bit ADC with up to 6 inputs
• 2x 16-bit timers

RF characteristics
• RX Sensitivity -99 dBm (-100 dBm Boost)
• TX Power 3 dBm (+7 dBm Boost)
• CE, FCC, IC Canada and Radio Telecom Japan certified

Software Stack Options – These include:

• EmberZNet PRO, which is an easy to use ZigBee platform for complex mesh networks.

• RF4CE (Radio Frequency for Consumer Electronics) for consumer remote controlled equipment.

• Custom applications that can be developed on top of a simple to use and low footprint PHY/MAC API library.

Ordering Information

Item	Order Number
DZ-ZB_S Standard Module	DZ_ZB_S[O][S]
[O] Output Options	A – Embedded SMD antenna
	P – Single ended 50 Ohm RF Pad
	U – 50 Ohm U.FL coaxial connector
[S] Stack Options	Z – EmberZNet PRO stack
	F – RF4CE stack
	X – Proprietary stack (MAC/Phy)