



Data Sheet

Bluetooth Low Energy Module, Shielded, Antenna, ASCII Interface, 12x22mm

Manufacturers Microchip Technology, Inc

Package/Case SMD

Product Type RF Integrated Circuits

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for RN4870-V/RM140 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **General Description**

The RN4870 BluetoothLow Energy module is designed for easy implementation into a broad range of applications. It delivers up to 2.5x throughput improvement and more secure connections vs. Bluetooth 4.1 based products. Developers can easily interface to the device via a standard UART interface, available on most Microcontrollers and Processors. The RN4870 has a completely integrated Bluetooth software stack, and offers a shielded regulatory certified version with built-in antenna. Developers are freed from the complexities of Bluetooth Software and RF development and can simply utilize the RN4870 as a wireline replacement. Perfect for IoT (Internet of Things) applications, when interfaced to a Bluetooth Low Energy enabled smartphone or Bluetooth Internet Gateway, applications can be monitored, controlled and updated from anywhere in the world.

The Microchip Bluetooth Data (MBD) mobile app is available tospeed up development for both Android and iOS.

Microchip's complimentary and confidential Wireless Check online design review service is available for customers who have selected our products for their application design-in\*.\*The online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Firmware Release Summary, see Software Release Notes for details:

RN4870-I(V)/RM140 - (FW 1.40.0) Fixes bug with random private addressing which created IOP issue with select Android devices. Added feature to turn off advertising at power-on in order to easily configure module with the host MCU before advertising. Available in industrial temperature range (I) and varying (V) for easier transition from RN4870-V/RM118.

RN4870-I/RM130 - (FW 1.30.0) Fixes bug with invalid Bluetooth address. Refer to Errata document for more information.

RN4870-I/RM128 - (FW 1.28.2) Introduces LE Secure Connections and Data Length Extension features among other bug fixes. Also improved the operating range to 85C.

RN4870-V/RM118 - (FW 1.18.3) Initial Release.

## **Features**

Bluetooth 5 Certified

Module certified for use in USA, Canada, Europe, Japan, Korea, Taiwan and China

Easy to use ASCII command interface for communication with the host microcontroller

Mobile Application supported in Microchip Bluetooth Data (MBD)

Latest Firmware Revision: 1.30

Supports LE Secure Connections levels 1-3

Supports up to 151 byte payloads with Data Length Extensions

White list for determining connections

Scripting features to allow for operation without a host microcontroller

MLDP compatibility with RN4020

Remote configuration capability

Antenna: Ceramic chip Antenna or external antenna connection

#### **Related Products**



### RN52SRC-I/RM100

Microchip Technology, Inc SMD



### RN4871-I/RM128

Microchip Technology, Inc SMD



# RN4871-V/RM140

Microchip Technology, Inc SMD



#### RN4871-I/RM130

Microchip Technology, Inc 16-SMD SMD



# <u>RN4871-V/RM130</u>

Microchip Technology, Inc SMD



## RN4871-V/RM118

Microchip Technology, Inc 16-SMD SMD



# RN4871-I/RM140

Microchip Technology, Inc SMD



# <u>RN-4870-SNSR</u>

Microchip Technology, Inc N/A