



RN-41 Bluetooth Socket Module

Complete Bluetooth Solution

The RN41-SM is a small form factor, low power, Bluetooth radio in a versatile, standard socket module package. Perfect for adding Bluetooth capability to existing products and embedded systems. The RN41-SM supports SPP/DUN profiles and is fully certified, making it a complete embedded Bluetooth solution. The Class 1 high power amplifier and on chip antenna delivers Bluetooth connectivity for distances up to 100M. The RN41-SM is the perfect product for engineers wanting to add wireless capability to their product but don't want to spend significant time and money developing Bluetooth specific hardware and software.

Features

- External UART connector for easy hardware integration
- Optional RS232 interface
- Fully qualified Bluetooth 2.1/2.0/1.2/1.1 module
- UART (SPP or HCI) and USB (HCI only) data interfaces.
- Sustained SPP data rates - 240Kbps (slave), 300Kbps (master)

Applications

- Cable replacement for handheld devices
- Measurement and monitoring systems
- Industrial sensor and control applications
- Medical devices
- Asset tracking
- Robotics

- HCI data rates - 1.5Mbps sustained, 3.0Mbps burst in HCI mode
- Bluetooth SIG Qualified, End Product Listing
- Certifications: FCC, ICS, CE
- Environmentally friendly, RoHS compliant

Specifications

- Secure communications, 128 bit encryption
- Error correction for guaranteed packet delivery
- UART local and over-the-air RF configuration
- Auto-discovery/pairing requires no software configuration (instant cable replacement).
- Auto-connect master, IO pin (DTR) and character based trigger modes
- Temperature rating -40C to 85C
- 3-5 VDC power
- 250uA deep sleep, 25mA standby, 100mA Tx
- User controlled GPIO
- Status LEDs

