



RM-CCx-DB

Sub-GHz dual band Radio Modem, 1W (+30dBm) Transmit Power,
5ppm timing and frequency accuracy

Features

RF

- EU863-870, US902-928 license free bands
- up to 1W (+30dBm) output power
- Embeds SAW filter and LNA for high reception sensitivity
- High efficiency Tx Power amplifier
- 5 ppm TCXOs for timing and frequency accuracy and stability
- Low current consumption
 - Rx: 30mA in receive mode
 - Tx: 500mA @ 3.3V, 500mW (+27dBm) output power
 - <10uA in sleep mode
- Outdoor range line-of-sight: up to 30km w/ dipole antenna
- Suitable for Systems Targeting Compliance With Europe ETSI: EN 300220 Cat 1.5, EN 303131, EN 303204, FCC part15

Protocol and Networking

- Available software stacks
 - TDMA (Time Division Multiple Access)
 - FHSS (Frequency Hopping)
- API commands to control packet routing
- 2-GFSK, 4-GFSK, MSK modulations
- FEC (Forward Error Correction)
- Digital RSSI information
- UART interface with flow control
- Hardware protocol status tracking



Special Features

- 3.3V - 5V power supply (depending on output power)
- Industrial grade temperature range from -40° to 85°C
- 4 general purpose IO
- Serial wire SWD programming port
- Small form factor (40mm x 21mm)

Typical Applications

- Narrowband Ultra-Low-Power Wireless Systems
- Wireless Metering (AMR) and Smart Grid (AMI)
- Wireless Sensor Networks
- Wireless Healthcare Applications
- Industrial Monitoring and Control
- Home and Building Automation