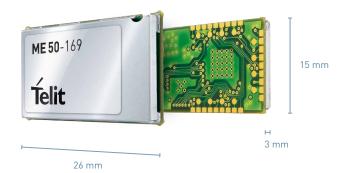


ME50-169





Product Description

The Telit ME50-169 is a wireless M-Bus module compliant with the EN13757 part 4 standard. It is ideally suited for use in one or two-way data links with gas, water, heat and electricity meters and concentrators.

The ME50-169 operates in the 169 MHz band and runs Wireless M-Bus N mode protocol, defined by EN13757-4 2012 for this band, on Tx power of up to 35 mW.

- Telit-developed Wireless M-Bus stacks
- Very low power consumption
- · Custom development and integration
- Pre-certified RF modules, LGA xE Form Factor, TTL RS232 interface
- Excellent RX sensitivity
- Download Over The Air (DOTA)
- Industrial temperature range

Key Benefits

- W M-Bus modes by Telit, leave integrators to work on applications
- · Wide area coverage
- Very low consumption for battery powered applications

Family Concept

The Telit portfolio of short range wireless modules is comprised of a wide range of innovative solutions ranging from ready-to-use wireless radio modems to OEM modules and RF design services.

Operating in the license-free ISM frequency bands of 169, 433, 868, 915 MHz, and 2.4 GHz, they're available in both standard air-interface protocols such as wireless M-Bus and ZigBee as well as proprietary low-power, low data rate technologies.

Telit certified short range modules share small dimensions, form factor, and are pin2pin compatible with one-another, which enables re-use of your design with different modules and air interface technologies as needed to meet your business and environmental requirements. Telit also offers a full set of tools to shorten and streamline your design effort.

Combine your Short Range module with

Cellular modules



GNSS modules



www.telit.com

ME50-169

Product Features

- Range: Up to 5000 m
- Up to 128 kB Flash, 8 kB RAM, 2 kB EEPROM
- 32.768 kHz real time clock (RTC), 4 timers
- Configurable output power

Networking

- Frequency: 169.400 -169.475 MHz
- Channels: 7 (6 channels 12,5 kHz bandwidth 2,4 kbps FSK or 4,8 kbps GMSK; 1 channel 50 kHz bandwidth, 19,2 kbps. 4 GFSK)
- Modulation: GFSK, GMSK, 4GFSK
- Hayes Mode
- Encryption AES and NRZ
- Download Over-the-Air

Optional Features

 ME50-169 module is available with DIP adapter and SMA connector

Data

Serial Data Rate: Up to 115.2 Kbps
Radio Data Rate: 2.4, 4.8 and 19.2 kbps

Environmental

- LGA mount technology, 30 pads RF pads for antenna
- Rectangular 26 x 15 mm, height 3 mm
- Weight 1.7 g
- Temperature: -40°C to +85°C

Interfaces

• Serial Interface: RS232 TTL (Tx, Rx, Cts, RTS)

Approvals

- EN13757-4 supported N mode
- CE certified module

Electrical & Sensitivity

- Output Power: 35 mW
- Power Supply: 2.0 to 3.6 V
- Board Consumption:
- Tx: 64 mA
- Rx: 33 mA
- Sleep: 1uA (external wake up, interrupt)
- Stand by: 2 μA (32.768 khz On)
- Sensitivity (BER <10-2): -120 dBm @ 2.4 kbps



Join the Telit Technical Forum

For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all IoT topics, get direct support by region [EMEA, North America, Latin America, APAC], take part in this quickly growing IoT community and exchange experiences.

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