

RS868v3

Medium Range RF Modem



Key Features

- 868 MHz frequency range
- Multi-channel transparent RS232 modem
- Output power up to 100 mW (20dBm)
- Up to 1000m range @ 1200bps
- External SAW filter for 868MHz band
- RF data rate up to 115kbps (300kbps option available)
- UART data rate: 1200bps-460800bps
- TTL signal levels
- Dedicated microcontroller with a data buffer
- Configurable packet size up to 128 bytes
- Small device size 29.5x54mm (without antenna)
- License-free in Europe
- AES encrypted wireless connection (option)
- Fully configurable

Description

RS868v3 wireless modem replaces any kind of RS232 cable.

Built-in microcontroller allows for configurable transmission parameters. Packets are transmitted until a valid transmission acknowledgement is received. Large data buffer helps minimize data loss. Modem is fully transparent, which means all transmitted data is received unchanged by the other end.

Quick configuration ability using jumpers allows for selection of 6 different RF transmission channels. Full configuration through a RS terminal from a PC or other automated solutions using text commands. Also possible to use external RS868 or USB connections.

Possibility for implementing dedicated solutions.

Scope of application

Remote measurement reading, encrypted wireless transmission, data transmission in areas that make using wires unfeasible, monitoring, remote control, M-BUS, telemetry.



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Specifications

Range	Up to 1000 m @ 1200bps (line of sight)
RF data rate	1200bps to 115200bps (300kbps option available)
RS232 data rate	Up to 460800bps TTL signal levels (3.3-5V)
Output power	Max. 20 dBm (configurable)
RF sensitivity	-120 dBm @ 1200bps
Power supply	5 VDC (optional 12VDC)*
Operating temperature	-20 to +70 °C
Antenna connector	SMA (external antenna)
Status LEDs	2 LEDs (power, RX/TX)
Frequency range	868.00 MHz to 869.6 MHz
Channel separation	Max. 200 kHz
Channel count	6 hardware-configured channels 64 software-configured channels
Modulation	FSK
Topology	point - point, point - broadcast
Power consumption	TX: 34mA / 13dBm, 100 mA / 20dBm RX: 16 mA
Dimensions	29.5x54mm (without antenna)

* Above 6VDC use only with lower RF speeds

Inquiries / Support

Please address any option, dedicated solution inquiries to support@migraftech.eu.

Manufacturer

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