

Bundles of AVR radio modules

The bundles are comprised of the especially current-saving radio modules of the deRFmega128 series, a pigtail interface adapter and an external antenna. The 150 mm long pigtail facilitates to place the stubby antenna also belonging to the bundle spatially apart. The transmitting power of the radio module with connected antenna typically amounts to +2.4 dBm ERP. The provided antenna enables a range of greater than 200 m.

Options / Versions

The bundles are available either with a pluggable or solderable AVR radio module with U.FL coaxial jack, pigtail and external antenna.

Software

All radio modules are already equipped with a wireless UART and can be operated immediately.

Content:

- Radio modules:
SMT or THT version of the deRFmega128 AVR radio module with U.FL coaxial jack
- Accessories:
interface adapter pigtail,
quarter wave stubby antenna 2.4 GHz rigid



Technical data of the deRFmega128 AVR radio modules

Dimensions	THT: 30 x 22.7 x 8.2 mm (22A02), SMD: 30 x 20.5 x 4.1 mm (22C02)
Operating temperature	-40°C ... +85°C
Control and display elements	none
Power supply	1.8 - 3.6 VDC
Power consumption	active: 18 mA TX/RX power-down: < 2 µA
Connections	2 x 23 pin socket
Antenna	quarterwave stubby antenna 2.4 GHz
Range	> 200 m (line of sight)
Frequency range	2.4 GHz
Transmitting power	+2.4 dBm ERP
Receiver sensitivity	-101 dBm
IEEE Standard	802.15.4
Microcontroller	ATmega128RFA1
Transceiver	integrated
Data rate (gross)	250/500 kbit/s, 1 Mbit/s, 2 Mbit/s
Interfaces	JTAG, UART, I2C, ADC, GPIO, SPI
Certification	CE, ETSI, FCC

