

A^{RF19}

"Low Cost" transmitters & receivers, ASK/FSK European and American versions



These transceivers enable an economic single-way **AM/FM digital link** over a range of **400m**. They are used as an asynchronous serial channel where the useful data rate ranges from **1.2 to 9.6kBps Manchester**. The transmission protocol remains up to the user. They use the 868 MHz band.

The products are available as **miniature daughter boards** to be integrated.

The applications covered range from **radio remote control** of gates, roller-blinds, **point to point transmission**, micro-networks ... in **general public or tertiary sectors of activity**, home automation, access control, alarms... ; and more generally all **low and medium rate data transmission applications** where security depends on information redundancy.

Specifications

Receiver

- Superheterodyne
- Frequency
- Bandwidth
- Serial digital output
- Supply voltage
- Rated consumption
- Sensitivity
- Sizes

Transmitter

- Crystal frequency reference
- Frequency
- Radiated RF power
- Modulation
- Serial digital input
- Supply voltage
- Rated consumption
- Size

Complete system

- Range
- Raw data rate
- Operating temperature

869MHz version (Europe)

869.525MHz
100kHz
0-Vcc
2.2 à 5V
10mA
-113dBm (ASK) -107dBm (FSK)
26 x 15 x 7mm (ASK)
25 x 16 x 7mm (FSK)

869.525MHz
10mW (10dBm)
ASK 100% or FSK +/- 25kHz
0-Vcc
2 to 5V
15mA
25 x 14 x 7mm

400m
1.2kbps to 9.6kbps Manchester
-20 / +70°C

915MHz version (USA)

915MHz
Idem
Idem
Idem
Idem
Idem
Idem
Idem

915MHz
750µW (~ -1 dBm)
Idem
Idem
Idem
Idem
Idem

Idem
Idem
Idem

Part Numbers

869.52MHz
 ARF7242A
 ARF7242B
 ARF7245A
 ARF7244A

915MHz
 ARF7242D
 ARF7242E
 ARF7245C
 ARF7244B

ASK transmitter
 FSK transmitter
 ASK receiver
 FSK receiver