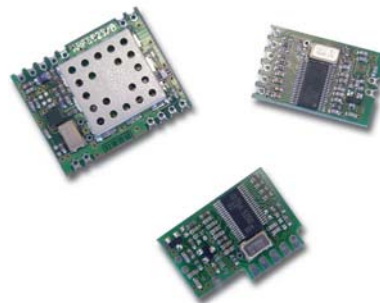


A^{RF27}

Transmitters & receivers 869.525MHz – 500mW LICENCE FREE for "long range" applications



These transmitters and receivers enable an economic single-way **AM/FM digital link** over a range of **4000m**. 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 869MHz 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, tertiary or industrial sectors of activity**, home automation, access control, alarms, intra-urban networks, agriculture... ; and more generally **all applications requiring long range or in a particular disturbed environment**.

Specifications

Receiver

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

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

Transmitter

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

869.525MHz
500mW (27 dBm)
ASK 100% or FSK +/-25kHz
0-Vcc
2.7 to 5V
150 to 600mA
24 x 30 x 7mm (ASK) 24 x 30 x 11mm (FSK)

Complete system

- Range
- Raw data rate
- Operating temperature

4000m
1.2kbps to 9.6kbps Manchester
-20 / +70°C

Part Numbers

ARF7243A : ASK transmitter
ARF7243B : FSK transmitter
ARF7245A : ASK receiver
ARF7244A : FSK receiver