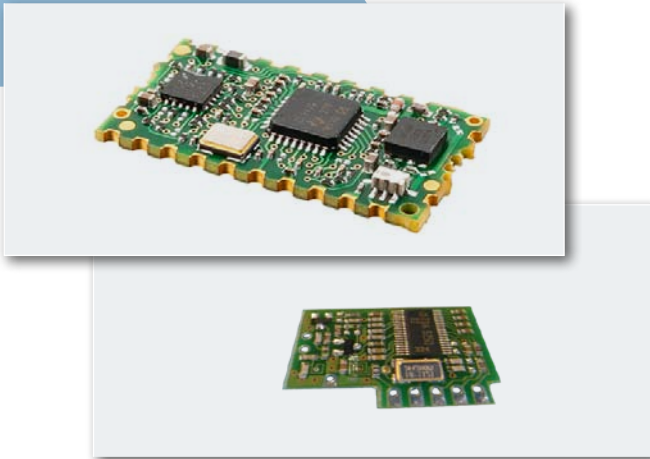


# ARF27 modules

## Transmitters & Receivers - 500mW - 869.525MHz



### ARF27 modules

These transmitters and receivers enable an **economic single-way digital link over a range of 6000m**. They use the 868 MHz ISM band.

Available in **ASK and FSK versions**, they are used as an asynchronous serial channel where the useful data rate ranges from 1.2 to 9.6kbps. The transmission protocol remains up to the user.

The **applications** covered range from **remote control** of gates, roller-blinds, **point to point transmission**, micro-networks ... in general public, tertiary or industrial sector activities, access control, alarms, inter-urban networks, agriculture..., and more generally, all **applications requiring scope or in disturbed environments**.

These modules are compliant with the **EN 300-220 V2010** standard.

### References

ARF7724AA ARF27 TX 500mW ASK - 869.525MHz  
ARF7786MA ARF27 TX 500mW FSK - 869.525MHz

ARF7245A ARF19/27 RX ASK - 869.525MHz  
ARF7244A ARF19/27 RX FSK - 869.525MHz

### Technical specifications

#### Transmitters

- Range : up to 6000m
- Power : 500mW
- RF radiated power : 27dBm
- Frequency : 869.525MHz
- RF data rate : 1.2 and 2.4 kbps (ASK modulation)
- RF data rate : 1.2 to 9.6 kbps (FSK modulation)

#### Hardware

- Interface : Raw radio (Input mode)
- RF Chip : CC1175

#### Firmware

- Frame encoding is done by client application.

#### Consumption & needs

- Power supply: 3 to 3.6V
- Maximum TX consumption : 600mA
- Standby consumption : < 10  $\mu$ A

#### General information

- Operating temperatures : -40°C / +85°C
- Dimensions: 22 x 12 x 3 mm
- Standard: EN 300-220 V2010
- CMS mounting

#### Receivers

- Sensitivity ASK version : -115 dBm (BER10<sup>-3</sup>)
- Sensitivity FSK version : -108 dBm (BER10<sup>-3</sup>)
- Frequency : 869.525MHz
- RF data rate : 1.2 à 9.6 kbps

#### Hardware

- Interface : UART
- RF chip : TDA5250

#### Consumption & needs

- Power supply : 3-3.6V
- RX consumption : 10mA
- Standby consumption : <1  $\mu$ A

#### General information

- Dimensions : 26 x 15 x 7mm
- Operation temperature : -40°C to +85°C
- Standard : EN300-220 V2010