

# ARF868 MR & LP Radio modems

## Highlights

- Range up to 4km
- +500 channels @14dBm / 2.4kbps
- 60 channels @14dBm / 57.6kbps
- Immediately usable
- RF data rates from 2.4 to 57.6kbps
- RS232/RS485 serial port or USB
- Autobaud function



**ARF868s** are new generation of radio modems that can be used to transmit bidirectional Half-Duplex wireless data for up to 4 km.

These 25mW products are available in two versions:

- **ARF868 MR** (Middle Range) with a range of up to 4 km.
- **ARF868 LP** (Long Power) with a range of up to 1 km.

Operating on the 863-870 MHz frequencies, these modems are **certified and can be used without a licence**.

In order to ensure simple and fast implementation, ARF868s are equipped with a unique DB9 connector incorporating automatic type (RS232/RS485) and data rate (Autobaud) recognition. An optional Serial-USB bridge is also available.

In order to permit their use for applications over very long distances or in harsh environment, **ARF868s are offering a repeater function\***.

ARF868s also propose a «Legacy» mode ensuring «air» compatibility with all the radio modems in the Adeunis RF's «X»3-PRO range.

The small sized casing, which is also light and robust, is equipped with a DIN-Rail fixing so that it can immediately be integrated into an industrial environment.

For difficult environments requiring increased protection for modems, **IP53 and IP67 options** are available.

Certified, modems in the ARF868 range **comply with the 2010 edition of the European RTTE directive EN300-220**.

## Performances ARF868 MR

Range: up to 4 km  
Sensitivity: -120dBm (BER10-3)

## Performances ARF868 LP

Range: up to 1 km  
Sensitivity: -112dBm (BER10-3)

## Common specifications

Power: 25mW  
Radiated RF power: 14dBm  
Frequencies: 863-870MHz

RF data rates: from 2.4 to 57.6kbps  
Number of channels: @14dBm / 2.4kbps: +500  
Number of channels: @14dBm / 57.6kbps: 60

## Hardware

Serial transmission rate: 1.2 to 115.2kbps  
Serial ports: RS232 - RS485 - USB optional  
Flow control: None or RTS/CTS

## Consumption & needs

Power supply range: 4.5 to 36Vdc

## Firmware

Transparent mode  
Repeater mode  
ARF X3-PRO «legacy» mode  
«Autobaud» function

## General information

Dimensions: 135 x 75 x 35mm  
Weight: 155g  
Temperature range: -30°C to +70°C  
Standards: EN300-220 V2010 / EN301-489 / EN60950

## References

- **ARF7942AA** ARF868 MIDDLE RANGE 25MW RADIO MODEM INTERNAL ANTENNA (**ARF7942BA** for TNC version)
- **ARF7943AA** ARF868 LOW POWER 25MW RADIO MODEM INTERNAL ANTENNA (**ARF7943BA** for TNC version)

\* to be released

## ADEUNIS RF

283 rue Louis Néel - Parc Technologique Pré Roux  
38920 CROLLES - France  
Tel.: +33 (0)4 76 92 07 77 - Fax: +33 (0)4 76 04 80 87  
www.adeunis-rf.com - arf@adeunis-rf.com