ARF868 ULR & LR
Radio modems

Highlights

- Range up to 20km

- 19 channels @27dBm

- +500 channels @14dBm

- Repeater mode

- Immediately usable

- RF data rates from 2.4 to 57.6kbps

- RS232/RS485 serial port or USB

ARF868s are new generation of radio modems that can be used to transmit bidi-rectional Half-Duplex wireless data for up to 20km.

These 500mW products are available in two versions:
- **ARF868 ULR** (Ultra Long Range) with a range of up to 20km.
- **ARF868 LR** (Long Range) with a range of up to 7km.

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 popose 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 ULR

Range: up to 20km
Sensitivity: -120dBm (BER10-3)

Performances ARF868 LR

Range: up to 7km
Sensitivity: -112dBm (BER10-3)

Common specifications

Power: 500mW
Radiated RF power: 27dBm
Frequencies: 863-870MHz

RF data rates: from 2.4 to 57.6kbps
Number of channels: @27dBm / 2.4kbps: 19
Number of channels: @14dBm / 2.4kbps: +500

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

Références

- **ARF7940AA** ARF868 ULTRA LONG RANGE 500MW RADIO MODEM INTERNAL ANTENNA (**ARF7940BA** for TNC version)

- **ARF7941AA** ARF868 LONG RANGE 500MW RADIO MODEM INTERNAL ANTENNA (**ARF7941BA** for TNC version)