

ARF868 ULR & LR

Radio Modems 27dBm - 500mW

► Strengths

- Range up to 20km
- 19 channels @27dBm
- +500 channels @14dBm
- Immediately usable
- RF data rates from 2.4 to 115.2kbps
- RS232/RS485 serial port or USB
- Autobaud function
- Configuration via dedicated software



868 MHz

► Description

ARF868s are new generation of radio modems that can be used to transmit bidirectional 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 for connection and power supply via a PC.

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.



Regulatory
Commitment



ARF868 ULR

Performances

- Range: up to 20km
- Power: 500mW
- Radiated RF power: 27dBm
- Sensitivity: -120dBm (BER10-3)
- Frequencies: 863-870MHz
- RF data rates: from 2.4 to 115.2kbps
- Number of channels: @27dBm / 2.4kbps: 19
- Number of channels: @14dBm / 2.4kbps: +500

Hardware

- Serial transmission rate: 2.4 to 115.2kbps
- Serial ports: RS232 - RS485 - USB optional
- Flow control: None or RTS/CTS

Firmware

- Packetized mode with ACK
- Transparent mode
- Addressed mode
- Network mode
- Repeater mode
- ARF X3-PRO «legacy» mode
- «Autobaud» function
- Configuration: Adeunis-RF software or AT commands

Consumption & needs

- Power supply range: 4.5 to 36Vdc

General information

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

Options

- IP53 protection
- IP67 protection
- Serial-USB bridge

ARF868 LR

Performances

- Range: up to 7km
- Power: 500mW
- Radiated RF power: 27dBm
- Sensitivity: -112dBm (BER10-3)
- Frequencies: 863-870MHz
- RF data rates: from 2.4 to 115.2kbps
- Number of channels: @27dBm / 2.4kbps: 19
- Number of channels: @14dBm / 2.4kbps: +500

Hardware

- Serial transmission rate: 2.4 to 115.2kbps
- Serial ports: RS232 - RS485 - USB optional
- Flow control: None or RTS/CTS

Firmware

- Packetized mode with ACK
- Transparent mode
- Addressed mode
- Network mode
- Repeater mode
- ARF X3-PRO «legacy» mode
- «Autobaud» function
- Configuration: Adeunis-RF software or AT commands

Consumption & needs

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Options

- IP53 protection
- IP67 protection
- Serial-USB bridge

► References

Article code	Designation
ARF7940AA	ARF868 ULTRA LONG RANGE 500MW RADIO MODEM INT. ANTENNA
ARF7941AA	ARF868 LONG RANGE 500MW RADIO MODEM INT. ANTENNA
ACC1500AD	IP53 OPTION
ACC1500AE	IP67 OPTION
ACC1500AB	SERIAL to USB BRIDGE
ACC1500AA	JACK CONNECTOR (POWER SUPPLY)
ACC1500AC	POWER SUPPLY BLOCK