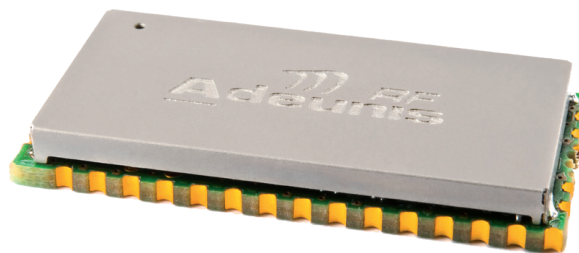


# NB868 Module

## Highlights

- Narrow Band RF module
- Up to 20km
- 500mW / 27dBm
- Licence-free frequencies 863-870MHz



With its unrivaled performance (RF sensitivity **-120dBm** / link budget **147dB**), our **NB868** module redefines the standards of very long distances data transmission.

This module uses **licence-free frequencies** and enables a two-way digital link over a range **up to 20 km** (line of sight).

The implementation of the Narrow Band technology allows a large number of available channels in the frequency band allowed : up to **19 channels @27dBm/2,4kbps** and **more than 500 channels @14dBm/2,4kbps**.

You can therefore consider the use of many products on the same site without disturbances or blindness.

Available in «**Ready-to-use**» version, this module focuses on **ease of integration**, even for non RF specialists, thus **limits technological risks, development time and costs**.

The **Narrow Band modules from Adeunis RF** have been certified by a notified body and declared **compliant to the 2010 edition of European R&TTE directive EN300-220**.

## Performances

Range : up to 20km  
Power: 500mW  
Radiated RF power : 27dBm  
Sensitivity : -120dBm  
Frequencies : 863 to 870MHz  
RD data rate : 2.4 to 57.6kbps  
Channels @27dBm/2.4kbps : 19  
Channels @14dBm/2.4kbps : +500  
Modulation : GFSK

Addressed Mode  
Network mode  
Packet mode  
Secured mode

## Consumption & needs

Operating voltage : 3-3.6V  
Consumption (stdby) : 8  $\mu$ A  
Consumption (RX) : 35mA  
Consumption (TX) : 700mA (27dBm)

## Hardware

Interfaces : UART  
Microcontroller : STM32 ARM Cortex-M3  
RF chip : TI CC1120

## General information

Dimensions : 32 x 16 x 3mm  
Weight : 3 g  
Operating temperature : -40°C /+85°C  
Certified EN300-220 V2010  
SMD mounting

## Firmware

Transparent Mode

## Reference

- **ARF7763BA** NB868-RTU-500mW Module

## PACKAGING DIMENSIONS AND PIN CONFIGURATIONS

