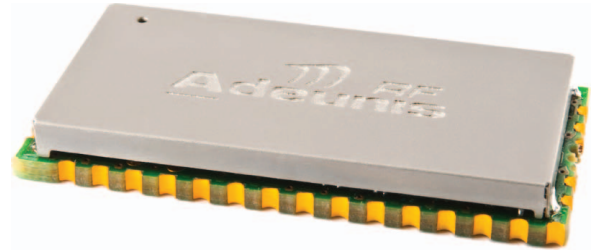


# NB868-25mW Module

## Highlights

- RF Narrow Band Module
- Range up to 4 km
- 25mW / 14dBm
- Free frequencies 863-870MHz



With its unrivaled performance (RF sensitivity **-120dBm** / link budget **134dB**), our **Low power NB868** allows to implement data transmission over long distances while maintaining **very low power consumption**.

This module uses **license-free frequencies** and enables a two-way digital link over a range **up to 4 km** (line of sight).

The use of Narrow Band technology allows a large number of available channels in the frequency band allowed : **+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** have been certified by a notified organization as being compliant with the **2010 version of the RTTE European Directive EN300-220** radio standard.

## Performances

Range : up to 4 km  
Power : 25mW  
Radiated RF power : 14dBm  
Sensitivity : -120dBm  
Frequencies : 863-870MHz  
RF data rate : de 2.4 à 57.6 kbps  
Modulation : GFSK

## Hardware

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

## Firmware

Transparent Mode

Addressed Mode

Repeater mode

Packet mode

Secured mode

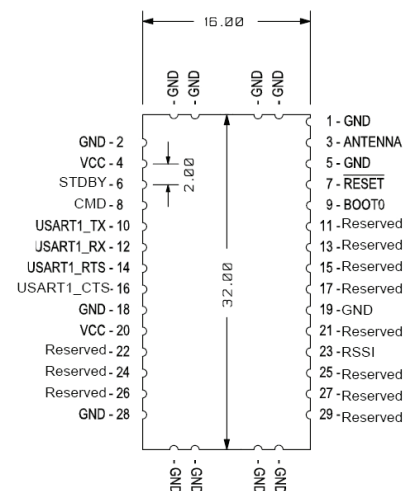
## Consumption & needs

Operating voltage : 3-3.6V  
Consumption (stdby) : 8  $\mu$ A  
Consumption (RX) : 24mA  
Consumption (TX) : 48mA (14dBm)

## General information

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

## Pin configuration & Dimensions



## Reference

- **ARF7764BA** NB868-RTU-25mW Module