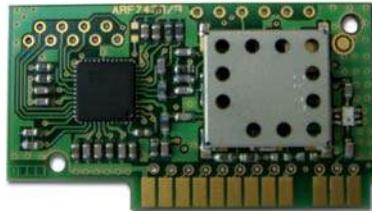




## Long distance UART TTL Module



This module enables a **two-way digital link** up to a range of **6000m**.

Available in the **869MHz** or **902/928MHz** in FHSS (Frequency Hopping Spread Spectrum) bands, these **pre-certified** module-modems usable **without a licence** can be qualified in compliance with the RTTE European Directive EN 300-220 / EN 300-489 and the FCC Part 15.247 American standard.

It is considered as a **complete radio solution** which integrates a digital radio transceiver, a microcontroller, a dedicated firmware. Data transmission is performed via a UART serial interface.

Its easy integration even for non RF specialists, allowing a high reduction of technologic risks and costs and a « Time to market » optimization.

It covers most applications requiring **long-distance communication**, automatic watering control system, long distance GPS data transmission, yachting autopilot, fireworks launching system, modular remote control system, modular radio telemetry system ...and more generally all types of applications requiring long range or in particular disturbed environment.

## Specifications

- Embedded protocol
- Embedded profiles
- Link setup & configuration
- Rough data rate
- Serial Link
- UART programmable data rates
- UART TTL ports
- Function modes
- Specific modes
- Programmable frequency
- Channelization
- Modulation
- Programmable radiated RF power
- Sensitivity
- Range
- RSSI level
- Operating voltage
- TX / RX consumption
- Operating temperature
- Size
- Can be qualified in compliance with

### 869MHz version (Europe)

- ADEUNIS RF enhanced & versatile**
- RF comm manager**
- Middle data rate multichannel Modem**
- High data rate monochannel Modem**
- Through AT commands**
- 10 & 57.6kbps**
- RS232 TTL or RS485**
- (lignes de gestion buffer 485)**
- From 0.6 to 115kbps**
- TXD - RXD - RTS - CTS**
- or RS485 driving capability**
- Transparent or Addressed**
- Development upon request**
- 869.40 to 869.65MHz**
- 1 (WB) – 3 (NB)**
- FSK**
- Up to 500mW / 27dBm**
- 106dBm (WB) / -110dBm (NB)**
- 5000m (WB) 6000m (NB)**
- RF signal qualification**
- 3.3V nominal (2.7 to 3.6V)**
- 550mA / 35mA**
- 30°C / +70°C**
- 42 x 20 x 4 mm**
- RTTE EN 300-220/EN 301 489**

### 902/928MHz version (US)

- Idem**
- Full & sub-band FHSS modem**
- Improved full & sub-band FHSS modem**
- Idem**
- Idem**
- Idem**
- From 1.2 to 57.6kbps**
- Idem**
- Addressed Secured**
- Idem**
- 902 to 928MHz**
- 50 channels**
- Idem**
- FCC Part 15.247**

### DemoKit - Integration kit including : demoboard, module, RS232 cable, power supply

- Evaluate the products
- Perform RF measurements
- Develop a prototype

### Part Numbers

- ARF7429A** : 869MHz version Module-modem
- ARF7429B** : 902/928MHz version Module-modem
- ARF7439Q** : 869MHz DemoKit
- ARF7439R** : 902/928MHz DemoKit