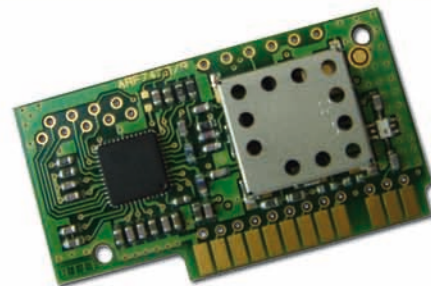




## Long distance wireless



This module enables a **two-ways wireless 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 a **complete wireless 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, reduces technical risks and costs and optimizes the « Time to market ».

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

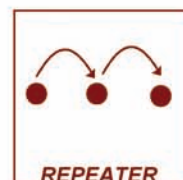
### 863/870MHz version

### 902/928MHz version

|                                  |                                                            |                                                |
|----------------------------------|------------------------------------------------------------|------------------------------------------------|
| • Embedded protocol              | <b>ADEUNIS RF enhanced &amp; versatile</b>                 |                                                |
|                                  | <b>RF comm manager</b>                                     |                                                |
| • Embedded profil                | <b>Middle data rate multichannel Modem</b>                 | <b>Full &amp; sub-band FHSS modem</b>          |
|                                  | <b>High data rate monochannel Modem</b>                    | <b>Improved full &amp; sub-band FHSS modem</b> |
| • Link setup & configuration     | <b>Through AT commands</b>                                 |                                                |
| • Rough data rate                | <b>Programmable up to 57.6kbps</b>                         |                                                |
| • Serial link                    | <b>RS232 TTL or RS485 (485 buffer lines)</b>               |                                                |
| • UART TTL ports                 | <b>TXD - RXD - RTS - CTS or RS485 driving capabilities</b> |                                                |
| • Specific modes                 | <b>Specific development upon request</b>                   |                                                |
| • Modulation                     | <b>FSK</b>                                                 |                                                |
| • Programmable radiated RF power | <b>Up to 500mW / 27dBm</b>                                 |                                                |
| • Sensitivity                    | <b>-108dBm (WB) / -112dBm (NB)</b>                         |                                                |
| • TX /RX consumption             | <b>700mA / 35mA</b>                                        |                                                |
| • Range                          | <b>5000m (WB) 6000m(NB)</b>                                |                                                |
| • RSSI level                     | <b>RF signal qualification</b>                             |                                                |
| • UART programmable data rates   | <b>Standards from 0.6 to 115kbps</b>                       | <b>from 1.2 to 57.6kbps</b>                    |
| • Modes                          | <b>Transparent/Adressed/Repeater</b>                       | <b>Adressed secured</b>                        |
| • Programmable frequencies       | <b>869.40 to 869.65MHz</b>                                 | <b>902 to 928MHz</b>                           |
| • Channelization                 | <b>1 (WB) – 3 (NB)</b>                                     | <b>up to 50 channels</b>                       |

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

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



### Part Numbers

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

### Your distributor