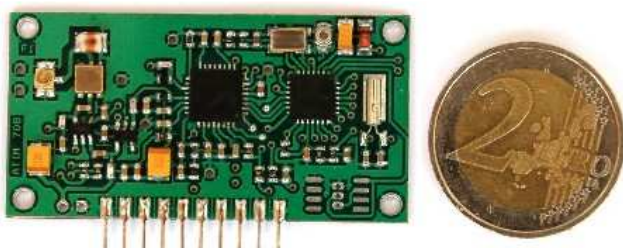


- Ready-to-use radio module with micro-controller
- 868 MHz band (contact us for 433 and 915MHz)
- Bi-directional communication up to 1km
- Low level serial link UART & I/O ports
- Operating modes : transparent and securized
- Configuration by Hayes commands
- 10-pin plug module
- U.FL connector for antenna
- « Low cost » radio module

> 1 km in  
868 MHz  
25 mW !



The **ARM-U8 radio transceiver** is a professional, high performance and low cost radio module enabling "**Wireless**" connectivity to any electronic board equipped with a micro-controller and serial port. **Your RF product is ready within a few days!**

It manages in standard transparent and securized/addressed mode and the configuration by Hayes commands. It is compatible with all the ARM radio modem range.

Its simple-to-use is unique : 4 pins are enough for basic operation : Vdc power supply (3.3V) and 0V, serial link Rxd (reception) and Txd (transmission).

The ARM-U8 can be plugged on a support or soldered by the edge or flat on a printed circuit (10 pins, 2.54mm pitch)

The radio channel (among 16) can be selected either by "Hayes" commands over serial port or by P0 ... P4 ports.

This module can switch in standby mode with a very reduced consumption and can be waked up on change of state or on cyclic wake-up for instance.

Depending on your applications, our team can customize the product and develop the appropriate software to fit with your requirement (required minimum quantity of order, contact us for further information).

#### Examples of applications :

- Radio smart sensors
- Securized remote controls
- Objet, person, counter, etc... counting
- Wireless terminal and display
- Remote RFID
- RF "spy"
- Traceability
- Home automation

## TECHNICAL FEATURES

### RADIO INTERFACE

- Bands: 868MHz (433 and 915MHz in option)
- ERP: 1 to 25mW according to standards and frequency range
- GFSK modulation
- Radio throughput : 9600bps NRZI
- 16 channels configurable by pin or by software
- Sensitivity in reception ~ -100dBm@9600bps

### INTERFACES

- 1 low-level serial port (3.3V) Rx Tx Rts Cts
- 3-5 low-level I/O ports (3.3V) of which 2 interruption inputs

### SOFTWARE FEATURES

- Transparent mode
- Securized and addressed mode
- Customized software on request (contact us)

### COMPATIBILITY

- With ARM-SE module (Ethernet) & ARM-CS
- With ARM-D module (Digital)
- With ARM-X module (I/O extensions...)

### CONFIGURATION

- By Hayes commands (« AT »)
- Parameters backup on EEPROM

### POWER SUPPLY

- 3.3Vcc +/-5%
- Consumption: < 100mA in transmission (25mW), <20mA in reception,
- Standby mode <50µA

### PINING

1. Gnd - 0V
2. Vcc +3.3V
3. P0 (digital input or counting)
4. P1 (digital input or counting)
5. Rxd
6. Txd
7. P2 (I/O port)
8. Rts or P3 (I/O port)
9. Cts or P4 (I/O port)
10. Gnd - 0V

### CONNECTIONS

- 10 pins (2.54mm pitch)
- Miniature U.FL type connector for antenna (UFL/SMA cable in option) or by soldering

### ENVIRONMENTAL

- Operating temperature : -20 to +55°C
- Storage temperature : -40 to +70°C

### REGULATORY APPROVALS

- RTTE1995/5/CE guideline
- ETS300-220-3 v1.1.1
- CEM EN 301 489-3 v1.4.1
- Security NF EN60950 Ed.2000

### DIMENSIONS

- Dimensions (l x w x t) : 53x27x3mm
- Weight : 5g