

- New upgradeable radio modem range
- 433 and 868 MHz (10 and 500mW) versions
- European standard, license-free
- High sensibility, long range
- Modes : transparent, trigger and Modbus protocol
- Configuration by Windows-based utility or Hayes commands
- Metal case for DIN rail mounting
- Robust and industrial design
- Excellent quality-price ratio



**> 5 km in  
868 MHz  
500 mW !**

The new **ARM** radio modem series is designed for applications such as remote control, monitoring, telemetry, data transfer, ... where cabling is sensitive and expensive (dam, weather station, mechanic installations, ...), as well as for mobile applications (vehicules, cranes, robotics, ...). The versatility of its device interfaces enables digital, analog, serial or Ethernet data transport from one point to another over long distances.

Particularly, the **ARM-D** radio modem is equipped with two digital inputs and two short circuit protected VMos outputs and in option one 4-20mA or 0-5V analogue input an output.

The quality of received radio signal can be monitored thanks to a RX LED: Green (good), Orange (fair), Red (bad).

It can operate under several modes: mirror (cyclic replicating of digital data from one module to another in both directions), trigger (transmission on change of state of one of the inputs) or Modbus slave (inputs and outputs can be read by radio from another ARM-S or ARM-E using Modbus protocol).

It is also equipped with an optional RS232 port for configuration purpose (using Windows-based **ARM Manager** software or **Hayes** commands).

It fits perfectly in a wireless communication architecture with other Ethernet, serial and digital ARM radio modems series.

## ARM Series

**ARM-S** : Serial RS232 / RS485 version

**ARM-E** : Ethernet version

**ARM-D** : « Digital » version with 2 digital inputs, 2 digital outputs

**ARM-DA** : « Digital + Analog» identical to ARM-D + 1 analog input and 1 analog output (0-5V or 4-20mA)

**ARM-X** : « eXtended » version including ARM-S or ARM-E mother board and daughterboard.

	433 MHz	868 MHz	2,4 GHz
<b>ARM-D</b>	✓	✓	-
<b>ARM-DA</b>	✓	✓	-
<b>ARM-S</b>	✓	✓	✓
<b>ARM-E</b>	✓	✓	✓
<b>ARM-X</b>	✓	✓	✓

## TECHNICAL FEATURES

### RADIO INTERFACE

- 433MHz or 868MHz bands
- ERP : 10mW / 100mW / 500mW according to standards and frequency range
- GFSK modulation
- Radio throughput : NRZI 19200 bps
- 16 channels configurable by coding wheel or software
- Reception sensitivity : -110dBm @9600bps

### INTERFACES

- 1 opto-coupled digital input (screw terminal)
- 1 Vmos 30V/0.5A max digital output (screw terminal)
- Option : 1 analogue input and 1 analogue output (4-20mA or 0-5V)

### SOFTWARE FEATURES

- Modbus slave mode
- Mirror mode
- Trigger mode (Transmission on change of state)
- Repeater option

### COMPATIBILITY

- with module ARM-E (Ethernet)
- with module ARM-S (Serie)
- with module ARM-X (versions eXtended)

### CONFIGURATION

- Windows-based utility or Hayes commands
- Parameter saving in EEPROM
- RJ13 in rear face for configuration using RS232 cable (in option)

### POWER SUPPLY

- External 10 - 30 Vdc by screw terminal
- Consumption: <50mA@12Vdc (10mW version)

### FORM FACTOR

- Aluminium case for DIN rail mounting
- Slim line for small electric cabinet
- Dimensions (hxlxd) : 105x30x105 mm
- Weight : 250 g

### ANTENNA

- SMA female antenna connector on front face
- Recommended antennas : 1/2 wave length whip antenna with elbow (h : 17cm) or 1/4 wave length antenna for metal case or cabinet (with ground plan)

### ENVIRONMENTAL

- Operating temperature : -20 to +50°C
- Storage temperature : -30 to +70°C
- Humidity : 0 to 100%

### REGULATORY APPROVALS

- ETS300-220
- R&TTE
- CE certification (pending)

### LEDS & MISC.

- Power LED
- Tx LED
- Rx LED
- System error LED
- 16-channel coding wheel