ARM-CS Advanced Radio Modem – Compact-Serial

- **New upgradeable radio modem range**
- **433/868 MHz Versions (10/500mW)**
- **European standard, license-free**
- **High sensibility, long range**
- **Modes : transparent & securized addressed (+ repeater / router)**
- **Configuration by Windows-based utility or Hayes commands**
- **IP65 waterproof casing**
- **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-CS** radio modem is equipped with one serial port which can be used either in **RS232, RS485** or **RS422** for connecting serial devices (PLCs, I/O terminals, water control systems, surveying applications, etc…). It fits perfectly in a wireless communication architecture with other 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 (+ option 1 0-5V / 4-20mA input and output)
ARM-X : « eXtended » version including ARM-S or ARM-E mother board and daughterboard.

DAUGHTERBOARDS
ARM-X4422: Extension card with 4 digital inputs and outputs, 2 x 4-20mA / 0-5V / 0-10V (ADC/DAC 12 bits) inputs and outputs.
ARM-X8800: Extension card with 8 digital opto-coupled inputs and 8 VMos protected outputs.
ARM-X…. : Contact us for specific requests.

	433 MHz	868 MHz
ARM-S	✓	✓
ARM-CS	✓	✓
ARM-E	✓	✓
ARM-D	✓	✓
ARM-DA	✓	✓
ARM-C	✓	✓

Accessoires ARM-CS

CAB-CS/1: RS232 + power supply cable
CAB-CS/2: test + resistors + ps cable
KIT-CS/M1: clips-mounting kit
KIT-CS/M2: mounting kit

SPECIFICATIONS TECHNIQUES

RADIO INTERFACE

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

INTERFACES

- 1 RS232 port (Rxd, Txd, Rts, Cts, Gnd)
- 1 RS485 port (2-wire) or 1 RS422 port (4-wire)

SOFTWARE FEATURES

- Transparent mode
- Securized addressed mode
- Repeater Mode
- Router option
- Test mode (ping-pong, spectrum analyzer, etc…)

PIN-OUT

- Subd-15 Female, same pin-out than 3AS radio modems

CONFIGURATION

- Windows-based utility or Hayes commands
- Parameter saving in EEPROM
- Test mode with RS232 I/O

POWER SUPPLY

- External 10-30Vdc (Subd 15F)
- Consumption: <500mA @ 500mW
- Low Power version, sleep mode ~ 500µA

FORM FACTOR

- IP65 waterproof aluminium case
- Dimensions: 115x55x35mm (without antenna)
- Weight : 180 g

ANTENNA

- SMA female connector on the top of the casing
- Recommended antennas :
  - ANT868-12FSC: ½ wave antenna with elbow
  - ANT868-14S-3.8: ¼ wave antenna with 3.80m cable (needs a ground plane)
  - ANT868-12S-3.8 : ½ wave antenna with 3.80m cable (doesn't need any ground plane).
  - ANT868-BZ : omni-antenna for mast mounting
  - ANT868-Y10 : directive Yagi 10dBi antenna

ENVIRONMENTAL

- Operating temperature : -20 to +50°C
- Storage temperature : -30 to +70°C
- Humidity : 0 to 95%

REGULATORY APPROVAL

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

LEDS & MISC

- Power LED
- Tx LED
- Rx LED
- System error LED

ATIM RADIOCOMMUNICATIONS
ATIM - sarl au capital de 30.000 € - Siret 410 460 422 00026 - Email: tech@atim.com - Web: www.atim.com
Chemin des guillets - F-38250 Villard de Lans - Phone: +33(0)4 76 95 50 65 - Fax: +33 (0)4 76 95 50 64