

www.adeunis-rf.com

- Flexible
 - Modular
 - ▶ Powerful
 - **▶** Robust
 - Certified

SHORT FORM CATALOGUE



Stand-Alone products Accessories

Wireless Expertise
www.adeunis-rf.com

Licence-free frequency Data Modems

863 / 870MHz

200m range - 10mW

ARF33-PRO Furone



Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 2 (WB) / 65 (NB) Flow control: None or RTS/CTS UART data rate: 9.6 / 57.6kbps Modes: T / A / R*

Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C

Enclosure: IP65 box

| Interface | Part Nb Integrated antenna | Part Nb External antenna |
|------------------|-------------------------------|-----------------------------|
| RS232 / RS485 | ARF7474KA | ARF7474LA |
| Self-powered USB | ARF7474MA | ARF7474NA |

863 / 870MHz

1000m range - up to 50mW

ARF43-PRO Europe



Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 2 (WB) / 65 (NB) Flow control: None or RTS/CTS UART data rate: 9.6 / 57.6kbps Modes: T / A / R*

Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C

Enclosure: IP65 box

| Interface | Part Nb Integrated antenna | Part Nb External antenna |
|------------------|-------------------------------|-----------------------------|
| RS232 / RS485 | ARF74740A | ARF7474PA |
| Self-powered USB | ARF7474QA | ARF7474RA |

869.525MHz

6000m range - up to 500mW

ARF53-PRO Europe



Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 2 (WB) / 65 (NB) Flow control: None or RTS/CTS UART data rate: 9.6 / 57.6kbps

Modes: T / A / R* Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C

Enclosure: IP65 box

| Interface | Part Nb Integrated antenna | Part Nb External antenna |
|------------------|-------------------------------|-----------------------------|
| RS232 / RS485 | ARF7474SA | ARF7474TA |
| Self-powered USB | ARF7474UA | ARF7474VA |

902 / 928MHz

6000m range - up to 500mW





Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 50 FHSS Flow control: None or RTS/CTS UART data rate: 9.6 / 57.6kbps Modes: T / A / S* Supply voltage: 4.5 to 36V

Operating temperature: -30 / +70°C Enclosure: IP65 box

| Interface | Part Nb Integrated antenna | Part Nb External antenna |
|------------------|-------------------------------|-----------------------------|
| RS232 / RS485 | ARF7474C | ARF7474E |
| Self-powered USB | ARF7474G | ARF7474I |

Under licence Data Modems

400 / 470MHz

25km range - 0.5 to 4W

ARF73



Sensitivity: -115dBm RF data rate: 9.6kbps Flow control: CTS

UART data rate: 4.8 to 115.2kbps

Modes: T / A / R* Supply voltage: 10 to 28V

Operating temperature: -30 / +70°C

Enclosure: IP65 box

| Interface | Part Nb External antenna |
|---------------|-----------------------------|
| RS232 / RS422 | ARF7499B |
| RS485 | ARF7499C |

Interoperable

Powerfull

Full certified

IP65 box

Flexible

^{*}T: transparent / A: addressed / S: secured / R: repeater

863 / 870MHz

200m to 25km range

ARF50-PRC



Must be connected to an ARFx3-PRO radio modem Range: depending on modem I/O refreshing rate: from 100ms** Digital Inputs: 0/40V NPN Digital Outputs: 0/40V PNP

Analog Inputs/Outputs: 12 bits 0/20mA or 0/10V

Supply voltage: 10 to 36V UART data rate: 9.6 / 57.6kbps

Connection to modem & supervisor: RS485

Bus: Modbus RTU

Operating temperature: -10 / +50°C

| I/O designation | Part Nb |
|--|-----------|
| 4 digital inputs + 4 digital outputs | ARF7663AA |
| 4 digital inputs + 4 digital outputs + 2 analog inputs + 2 analog outputs | ARF7663BA |

WIFI® Modems

2.41 / 2.48GHz

200m range - 802.11b/g/i

ARF45-PRO



Sensitivity: -82dBm UART data rate: 2.4 to 921.6kbps Supply voltage: 8 to 30V Serial port: RS232 Flow control: RTS/CTS Set-up & configuration: RS232 - Telnet / Http Mode: T*

Operating temperature: -30 / +70°C Enclosure: IP65 box

| Security | Part Nb |
|--|----------------------|
| WEP64, WEP128, WPA-PSK | ARF7532I |
| WEP64, WEP128, WPA-PSK, WPA2-PSK, WF Enterprise | PA2- ARF7532K |

BLUETOOTH® Dongles

2.41 / 2.45GHz

150m range - Class1

ARF62



Supply voltage: 3.8 to 20V Sensitivity: -87dBm UART data rate: 9.6 to 115.2kbps UART ports: TXD/RXD - RTS/CTS Profiles: GAP - SDAP - SPP - DUN Size: 65x20x25mm

| Connector / Power supply | Part Nb |
|-----------------------------|----------|
| DCE/DB9F + power supply | ARF7501B |
| DTE/DB9M + power supply | ARF7502B |
| DTE/DB15HD M + self-powered | ARF7503C |
| DCE/DB9F + DTE/DB9M | ARF7509A |

For a fast and easy installation of the products

Softwares



Free download on www.adeunis-rf.com

We recommend to use the ADEUNIS RF softwares and programs for configuration, testing and for updating the firmware of the following products:

- ARF53 (from version V1.01)
- «X3-PRO» RF Modems range (ARF33-PRO, ARF43-PRO, ARF53-PRO)
- ARF62 (from version V0.07)
- ARF73 (from version V1.06)
- ARF50
- ARF50-PRO

Addressed

Transparent

Repeater

Secured

Modular

^{**}Architecture: 1 master to 1 RF slave with a ARF53 modem in WB (rate 57.6kbps)

433.92MHz

300m range - 1 way

ARF18







Remote control Modulation: ASK Power: 1mW

Operating temperature: -30 / +70°C

OEM receiver

Consumption: 15mA Sensitivity: -104dBm Power supply: 2.7 / 3.6V

Relay receivers

Consumption: 30mA (open relays) - 130mA (closed)

Sensitivity: -104dBm Power supply: 15 to 30V Enclosure: IP65 box

Serial decoder

UART data rate: 2.4 to 115.2kbps

Consumption: 16mA (RS232) - 32mA (RS485)

Sensitivity: -104dBm Power supply: 8 to 30V Enclosure: IP65 box

| Remote control numbers of keys | Part Nb |
|--------------------------------|----------|
| 1 key | ARF7291A |
| 2 keys | ARF7291B |
| 4 keys | ARF7291D |
| 8 keys | ARF7291R |

| Receiver versions | | Part Nb |
|-------------------|--|----------|
| OEM | Outputs: serial interface level, 0/VCC | ARF7293A |
| | 1 relay NO/NC | ARF7341F |
| Relays | 2 relays 1NO + 1NO/NC | ARF7341D |
| | 4 relays 4NO | ARF7341B |
| Serial decoder | Serial port: RS232 | ARF7263K |
| Serial decoder | Serial port: USB | ARF7263S |

869.525MHz

300m range - 2 ways

ARF18





y 300m range - 2 W

Remote control Modulation: FSK Power: 6mW

Operating temperature: -30 / +70°C

OEM receiver

Consumption: 15mA Sensitivity: -104dBm Power supply: 2.7 / 3.6V

| Numbers ok keys | Part Nb |
|-----------------|----------|
| 1 key | ARF7292A |
| 2 keys | ARF7292B |
| 3 keys | ARF7292C |
| 4 keys | ARF7292D |

| Receiver version | | Part Nb |
|------------------|---|----------|
| OEM | Outputs: serial interface level, 0/VCC | ARF7294A |

Perform your application in a few minutes



Evaluate ADEUNIS RF products Perform RF measurements Develop a prototype

Kit contain

1 demoboard

1 OEM receiver

1 remote control

1 whip antenna

1 RS232 cable

Remote control Starter kit

| Versions | Part Nb |
|---------------------|----------|
| 433.92MHz - 1 way | ARF7439S |
| 869.525MHz - 2 ways | ARF7439M |

Antennas

Impedance: 50 Ohms
TNC connector type: Male

| | Designation | Frequency | Gain | Size | Part Nb |
|----------|--|---------------------|------|-------------------------|---------------|
| | Flexible antenna 1/2 Wave | 863/870MHz | 2dBi | 17.5 cm | ACC-ANT-10000 |
| | Antenna 1/2 Wave | 902/928MHz | 5dBi | 21.5 cm | ACC-ANT-10011 |
| | Antenna 1/2 Wave | 400/440MHz | 5dBi | 39 cm | ACC-ANT-10044 |
| | Antenna 1/2 Wave | 425/455MHz | 5dBi | 38 cm | ACC-ANT-10055 |
| | Antenna 1/2 Wave | 445/470MHz | 5dBi | 36.5 cm | ACC-ANT-10066 |
| | Antenna 1/4 Wave + fixing system | 400/470MHz | OdBi | 10 x 10x 3 cm + 17cm | ACC-ANT-10077 |
| | Dual-band GPS/ISM groundplane antenna | 869MHz - GPS | 2dBi | 6.8 x 4.8 x 4 cm | ACC-ANT-10100 |
| S | Dual-band GPS/ISM groundplane antenna | 410/430MHz - GPS | 2dBi | diam: 16 cm | ACC-ANT-10111 |
| | Groundplane antenna | 410/430MHz | 2dBi | diam: 16cm | ACC-ANT10122 |

Antenna adapters & supports

| | Designation | TNC Connector type | Size | Part Nb |
|----------|---|----------------------------------|----------------|---------------|
| 88 | TNC converter package | 1 Male/Male + 1 Female/Female | - | ACC-ADP-10011 |
| | Fixing system for antenna | Male/Female adapter | 10 x 10 x 3 cm | ACC-ADP-10022 |
| # | DIN Rail fixing systems for ADEUNIS RF IP65 boxes | - | - | ACC-ADP-10033 |

Antenna cables

| | Designation | TNC Connector type | Size | Part Nb |
|------------|------------------------------------|--------------------|--------|---------------|
| \bigcirc | Antenna cable - Coax 0.5dB loss | Male to Female | 100 cm | ACC-CBL-10055 |
| | Antenna cable - Coax 1dB loss | Male to Female | 300 cm | ACC-CBL-10066 |
| | Antenna cable - Coax 1.5dB loss | Male to Female | 500 cm | ACC-CBL-10077 |

Power block

| Designation | Connector type | Size | Part Nb |
|---|--|--------|---------------|
| Power block - 220Vac/50mA to 9Vdc/500mA | Jack 3.5/1.3 «+ on the middle» connector | 185 cm | ACC-PWB-10000 |

Data & power cables

| | Designation | Connector | Size | Part Nb |
|-------------|--|---|--------------------|---------------|
| | Cable | USB A to serial RS232 converter | 60 cm | ACC-ADP-10000 |
| (0) | Power cable | USB A to jack 3.5/1.3 «+ on the middle» connector | 200 cm | ACC-CBL-10000 |
| | Y cable | 6 wires (power & data) to DB9F + 2 power wires | 200 cm | ACC-CBL-10011 |
| | Bundle including * Y cable: ACC-CBL-10011 * Power block: ACC-PWB-10000 | 6 wires (power & data) to DB9F + 2 power wires + Jack 3.5/1.3 «+on the middle» connector | 200 cm + 185 cm | ACC-CBL-10022 |
| | Serial RS232 cable | DB9F to DB9M | 100 cm | ACC-CBL-10033 |
| | Serial RS232 cable | DB9F to DB9F | 100 cm | ACC-CBL-10044 |
| Q | 4-wire cable | 4-wire WAGO terminal block to breakout cable | 75 cm | ACC-CBL-10111 |
| √ Q- | 4-wire cable | 4-wire WAGO terminal block to breakout cable | 200 cm | ACC-CBL-10122 |
| \bigcirc | 4-wire cable for ARF50 chaining | | 100 cm | ACC-CBL-10133 |

For a quick & safe choice

Accessories selection guide

| | | A | ARF3 | 3-PRO |) | I | ARF4 | 3-PRO |) | ARF53-PRO | | | | | AR | F73 | | F50 PRO | ARF45 & PRO | | ARF62 | | | | | | |
|-------------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|------------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| | | ARF7474KA | ARF7474LA | ARF7474MA | ARF7474NA | ARF74740A | ARF7474PA | ARF7474QA | ARF7474RA | ARF7474SA | ARF7474TA | ARF7474UA | ARF7474VA | ARF7474C | ARF7474E | ARF7474G | ARF74741 | ARF7499B | ARF7499C | ARF7663A | ARF7663B | ARF75321 | ARF7532K | ARF7501B | ARF7502B | ARF7503C | ARF7509A |
| | ACC-ANT-10000 | Х | Х | Х | Х | Х | Х | Х | Х | х | Х | Х | Х | | | | | | | | | | | | | | |
| | ACC-ANT-10011 | | | | | | | | | | | | | Х | Х | Х | Х | | | | | | | | | | |
| | ACC-ANT-10044 | | | | | | | | | | | | | | | | | Х | Х | | | | | | | | |
| | ACC-ANT-10055 | | | | | | | | | | | | | | | | | Х | Х | | | | | | | | |
| ANTENNAS | ACC-ANT-10066 | | | | | | | | | | | | | | | | | Х | Х | | | | | | | | |
| | ACC-ANT-10077 | | | | | | | | | | | | | | | | | Х | х | | | | | | | | |
| | ACC-ANT-10100 | х | Х | Х | Х | Х | Х | х | Х | Х | Χ | Х | Х | | | | | | | | | | | | | | |
| | ACC-ANT-10111 | | | | | | | | | | | | | | | | | Χ | Х | | | | | | | | |
| | ACC-ANT10122 | | | | | | | | | | | | | | | | | Χ | Х | | | | | | | | |
| ANTENNA | ACC-ADP-10011 | | Х | | Х | | Х | | Х | | Χ | | Х | | Х | | Х | Х | х | | | | | | | | |
| ADAPTERS | ACC-ADP-10022 | | Х | | Χ | | Χ | | Χ | | Χ | | Χ | | Х | | Χ | Χ | Х | | | | | | | | |
| & SUPPORTS | ACC-ADP-10033 | х | х | х | х | х | Х | х | Х | Х | Χ | Х | х | Х | х | х | Х | | | | | х | Х | | | | |
| | ACC-CBL-10055 | | Х | | Χ | | Χ | | Χ | | Χ | | Χ | | Х | | Х | Χ | Х | | | | | | | | |
| ANTENNA CABLES | ACC-CBL-10066 | | Х | | Х | | Х | | Х | | Χ | | Х | | Х | | Х | Х | х | | | | | | | | |
| | ACC-CBL-10077 | | Х | | Х | | Х | | Χ | | Χ | | Х | | Х | | Х | Х | Х | | | | | | | | |
| | ACC-ADP-10000 | | | | | | | | | | | | | | | | | | | | | | | Χ | Х | | Х |
| | ACC-CBL-10000 | | | | | | | | | | | | | | | | | | | | | | | Χ | Х | | Х |
| | ACC-CBL-10011 | Х | Х | | | Х | Χ | | | Х | Χ | | | Х | Х | | | | | | | Х | Х | | | | |
| DATA & | ACC-CBL-10022 | Х | Х | | | Х | Χ | | | Х | Χ | | | Χ | Х | | | | | | | | | | | | |
| POWER CABLES | ACC-CBL-10033 | | | | | | | | | | | | | | | | | | | | | | | Х | Х | | Х |
| CADLES | ACC-CBL-10044 | | | | | | | | | | | | | | | | | | | | | | | | | | Х |
| | ACC-CBL-10111 | Х | Х | | | Х | Х | | | Х | Χ | | | Х | Х | | | Х | Х | Х | Х | | | | | | |
| | ACC-CBL-10122 | Х | Х | | | Х | Х | | | Х | Х | | | Х | Х | | | Х | Х | Х | Х | | | | | | |
| | ACC-CBL-10133 | | | | | | | | | | | | | | | | | | | Χ | Х | | | | | | |
| POWER BLOCK | ACC-PWB-10000 | Х | Х | | | Х | Х | | | Х | Х | | | Х | Х | | | | | | | | | Х | Х | | Х |

From idea ... to product ... to market

Short time to market through wireless engineering expertise combinated with low-cost production



Typical applications



Public & consumer market

Home automation
Access control
Alarm - Security
Technical building management
Clock system management
Medical
Electronic surveillance



Industry

Remote control for automation Measurement & telemetry Remote management Traceability On-board systems Door remote control Logistics & storage



Energy - Environment

Metering Gas and oil industries Water treatment Photovoltaic Windmill



Long range

Site-to-site communication Electronic display Signaling Agriculture Transport

About ADEUNIS RF



Founded in 1993, Adeunis RF is a privately owned independent company, designing and manufacturing solely Wireless Products. Based in the High Tech Valley near Grenoble and partnered with several research institutes and organizations, we benefit from unique technical expertise.

With an installed base of more than 4 million units and an annual production exceeding 500 000 pieces, we have acquired experience in a myriad of markets and applications requiring wireless connectivity. Our success is not only based on profitability and market share, but on building enduring, long term partnerships with our Customers based on our core values of innovation, quality, compliance and environmental responsibility.

Services & skills

Skills area

Solutions using Bluetooth, Wifi & Zigbee standards Worlwide ISM bands Rf solutions from kHz to GHz Low consumption products Mesh - Addressed - Repeater & Transparent transmission modes

Standard expertise

Owner of several patents
Strong worldwide Standards knowledge
Partnership with European laboratories
Capability to propose pre/full certifications and European Notifications
Strict compliance with Standards: EN300-220, EN301-489, EN300-113, EN60950 ...

Your local distributor



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