

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 - 10m\	N	ARF	B3-PRO Europe
I	Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 2 (WB) / 65 (NB)	Interface	Part Nb Integrated antenna	Part Nb External antenna
Addurin	Flow control: None or RTS/CTS	RS232 / RS485	ARF7474KA	ARF7474LA
	UART data rate: 9.6 / 57.6kbps Modes: T / A / R*	Self-powered USB	ARF7474MA	ARF7474NA
	Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C Enclosure: IP65 box			
863 / 870MHz	• 1000m range - up t	o 50mW	ARF	13-PRO Europe
1	Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps Number of channels: 2 (WB) / 65 (NB)	Interface	Part Nb Integrated antenna	Part Nb External antenna
a all ster	Flow control: None or RTS/CTS	RS232 / RS485	ARF74740A	ARF7474PA
	UART data rate: 9.6 / 57.6kbps Modes: T / A / R*	Self-powered USB	ARF7474QA	ARF7474RA
869.525MHz	<ul> <li>Enclosure: IP65 box</li> <li>6000m range - up t</li> </ul>	o 500mW		53-PRO Europe
1	Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps	Interface	Part Nb Integrated antenna	Part Nb External antenna
	Number of channels: 2 (WB) / 65 (NB) Flow control: None or RTS/CTS	RS232 / RS485	ARF7474SA	ARF7474TA
Addebrin -	UART data rate: 9.6 / 57.6kbps	Self-powered USB	ARF7474UA	ARF7474VA
	Modes: T / A / R* Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C Enclosure: IP65 box			
902 / 928MHz	▶ 6000m range - up t	o 500mW	/	ARF53 USA
1	Sensitivity: -112dBm RF data rate: 9.6 / 57.6kbps	Interface	Part Nb Integrated antenna	Part Nb External antenna
	Number of channels: 50 FHSS Flow control: None or RTS/CTS	RS232 / RS485	ARF7474C	ARF7474E
Activities 1	UART data rate: 9.6 / 57.6kbps Modes: T / A / S*	Self-powered USB	ARF7474G	ARF7474I
	Supply voltage: 4.5 to 36V Operating temperature: -30 / +70°C Enclosure: IP65 box			
Under licence				

400 / 470MHz	▶ 25km range - 0.	5 to 4W	ARF73
Manual .	Sensitivity: -115dBm RF data rate: 9.6kbps Flow control: CTS	Interface	Part Nb External antenna
Addition	UART data rate: 4.8 to 115.2kbps	RS232 / RS422	ARF7499B
0-10-	Modes: T / A / R* Supply voltage: 10 to 28V	RS485	ARF7499C
	Operating temperature: -30 / +70°C Enclosure: IP65 box		
Interoperable	Powerfull Full certi	fied IP65 box	Flexible
*T: transparent / A: addres	sed / S: secured / R: repeater		

www.adeunis-rf.com

## I/O Modules

863 / 870MHz

### 200m to 25km range

ARF50-PRO



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 - 80	2.11b/g/i ARF48	5-PRO
	Sensitivity: -82dBm UART data rate: 2.4 to 921.6kbps	Security	Part Nb
	Supply voltage: 8 to 30V Serial port: RS232 Flow control: RTS/CTS Set-up & configuration: RS232 - Telnet / Http	WEP64, WEP128, WPA-PSK	ARF7532I
		WEP64, WEP128, WPA-PSK, WPA2-PSK, WPA2- Enterprise	ARF7532K
	Mode: T* Operating temperature: -30 / +70°C Enclosure: IP65 box		
BLUETOOTH	<b>B</b> Dongles		

•	150m	range -	Class1



2.41 / 2.45GHz

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

### **Softwares**

ARF62

### For a fast and easy installation of the products

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)
- ARE50 Softwares • ARF50-PRO

Free download on www.adeunis-rf.com



\*\*Architecture: 1 master to 1 RF slave with a ARF53 modem in WB (rate 57.6kbps) www.adeunis-rf.com

## **Remote Control**

#### 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
Relays	1 relay NO/NC	ARF7341F
	2 relays 1NO + 1NO/NC	ARF7341D
	4 relays 4NO	ARF7341B
Serial decoder	Serial port: RS232	ARF7263K
	Serial port: USB	ARF7263S

#### 869.525MHz

### 300m range - 2 ways

### **ARF18**



#### **Remote control**

Modulation: FSK Power: 6mW Operating temperature: -30 / +70°C

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

**OEM** receiver

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

## Accessories

### 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	ACC1400AA
	Antenna 1/2 Wave	902/928MHz	5dBi	21.5 cm	ACC1400BM
	Antenna 1/2 Wave	400/440MHz	5dBi	39 cm	ACC1400A0
	Antenna 1/2 Wave	425/455MHz	5dBi	38 cm	ACC1400AP
	Antenna 1/2 Wave	445/470MHz	5dBi	36.5 cm	ACC1400AQ
	Antenna 1/4 Wave + fixing system	400/470MHz	OdBi	10 x 10x 3 cm + 17cm	ACC1400BP
٨	Dual-band GPS/ISM groundplane antenna	869MHz - GPS	2dBi	6.8 x 4.8 x 4 cm	ACC1400AU
<b>S</b>	Dual-band GPS/ISM groundplane antenna	410/430MHz - GPS	2dBi	diam: 16 cm	ACC1400AS
<b>S</b>	Groundplane antenna	410/430MHz	2dBi	diam: 16cm	ACC-1400AE

### Antenna adapters & supports

	Designation	TNC Connector type	Size	Part Nb
ØØ	TNC converter package	1 Male/Male + 1 Female/Female	-	ACC1400AM
	Fixing system for antenna	Male/Female adapter	10 x 10 x 3 cm	ACC1400AN
<b>  </b>	DIN Rail fixing systems for ADEUNIS RF IP65 boxes	-	-	ACC1400AT

### Antenna cables

	Designation	TNC Connector type	Size	Part Nb
$\bigcirc$	Antenna cable - Coax 0.5dB loss	Male to Female	100 cm	ACC1400AH
$\bigcirc$	Antenna cable - Coax 1dB loss	Male to Female	300 cm	ACC1400AI
Q	Antenna cable - Coax 1.5dB loss	Male to Female	500 cm	ACC1400AJ

## 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	ACC1400AB

### www.adeunis-rf.com

## Data & power cables

	Designation	Connector	Size	Part Nb
	Cable	USB A to serial RS232 converter	60 cm	ACC1400AG
$\mathcal{O}$	Power cable	USB A to jack 3.5/1.3 «+ on the middle» connector	200 cm	ACC1400BR
	Y cable	6 wires (power & data) to DB9F + 2 power wires	200 cm	ACC1400AC
	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	ACC1400AR
$\square$	Serial RS232 cable	DB9F to DB9M	100 cm	ACC1400BS
$\square$	Serial RS232 cable	DB9F to DB9F	100 cm	ACC1400BT
$\square$	4-wire cable	4-wire WAGO terminal block to breakout cable	75 cm	ACC1400BK
,Q-	4-wire cable	4-wire WAGO terminal block to breakout cable	200 cm	ACC1400BL
$\bigcirc$	4-wire cable for ARF50 chaining		100 cm	ACC1400BV

## For a quick & safe choice

## Accessories selection guide

			ARF3	3-PR(	D	ARF43-PRO				ARF53-PRO									F73	ARF50 & PRO		ARF45 & PRO		ARF62			
		ARF7474KA	ARF7474LA	ARF7474MA	ARF7474NA	ARF74740A	ARF7474PA	ARF7474QA	ARF7474RA	ARF7474SA	ARF7474TA	ARF7474UA	ARF7474VA	ARF7474C	ARF7474E	ARF7474G	ARF7474I	ARF7499B	ARF7499C	ARF7663A	ARF7663B	ARF75321	ARF7532K	ARF7501B	ARF7502B	ARF7503C	ARF7509A
	ACC1400AA	x	х	х	х	х	х	х	х	х	х	х	х														
	ACC1400BM													Х	х	x	Х										
	ACC1400AO																	х	х								
	ACC1400AP																	х	x								
ANTENNAS	ACC1400AQ																	х	х								
	ACC1400BP																	х	x								
	ACC1400AU	x	x	x	х	x	х	х	х	х	х	х	х														
	ACC1400AS																	х	x								
	ACC1400AE																	х	х								
ANTENNA	ACC1400AM		x		х		х		х		х		х		х		х	х	х								
ADAPTERS	ACC1400AN		x		х		х		х		х		х		х		х	х	х								
& SUPPORTS	ACC1400AT	x	x	х	х	x	x	x	х	х	х	х	х	х	x	x	х					х	х				
	ACC1400AH		x		х		x		х		х		х		х		х	х	x								
ANTENNA CABLES	ACC1400AI		x		х		x		х		х		х		x		х	х	x								
0.010	ACC1400AJ		х		х		х		х		х		х		х		х	х	х								
	ACC1400AG																							х	х		х
	ACC1400BR																							х	х		x
	ACC1400AC	x	x			х	х			х	х			х	х							х	х				
DATA &	ACC1400AR	х	x			х	х			х	х			х	х												
POWER	ACC1400BS																							х	х		х
CABLES	ACC1400BT																										х
	ACC1400BK	x	x			х	х			х	х			х	х			х	х	x	х						
	ACC1400BL	х	х			х	х			х	х			х	х			х	х	х	х						
	ACC1400BV																			х	х						
POWER BLOCK	ACC1400AB	x	x			x	x			x	х			х	x									x	x		x

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

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



### **Typical applications**







Energy - Environment Metering Gas and oil industries Water treatment Photovoltaic Windmill





#### Industry

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

Long range Site-to-site communication Electronic display Signaling Agriculture Transport

#### www.adeunis-rf.com

### 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



283 rue Louis Néel - Parc Technologique Pré Roux 38920 CROLLES - France Tél. : +33 (0)4 76 92 07 77 Fax : +33 (0)4 76 04 80 87 arf@adeunis-rf.com www.adeunis-rf.com - www.vokkero.com