

SHORT FORM CATALOGUE



Stand-Alone products and Accessories



TYPICAL RF APPLICATIONS

Energy Efficiency - AMR



Remote energy reading and measurement, urban heating control, energy management in buildings and data centers, remote control of public lighting, energy cartography and regulation. RF solutions developed by ADEUNIS RF enable fine and optimized management of resources while achieving substantial energy savings.

Industry



ADEUNIS RF contributes to the development of wireless systems in hostile industrial environments: industrial machine control, automatic system monitoring, trouble shooting, radio control for lifting machines, satellite positioning systems, drilling machines, container tracking, etc.

Automation, Security & control



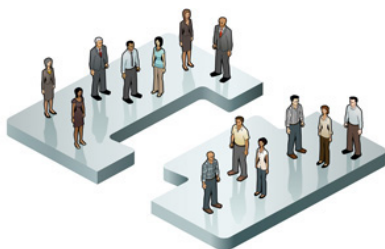
ADEUNIS RF is present in many fields linked to the security of goods and persons and access control: building security, alarms, access control to sites and danger zones, control of retractable bollards, management of hourly badge readers, secure stoppage devices for maintenance crews, home automation applications, ...

Transportation & infrastructures



By providing our radio skill, ADEUNIS RF contributes to developing complex systems in the field of transport, such as the control of traffic light priority, information for travellers, timetable synchronisation, car park and vehicle management, electronic display systems, signalling, satellite location systems....

General public



Geolocation systems, remote control of autonomous humanoid robots, maintenance of ticket validators, real-time display of the number of parking spaces available, queue management, electronic score displays, totems for fuel, ..., ADEUNIS RF designs and develops radio solutions based on extremely varied customer issues.

LICENCE-FREE RADIO MODEMS

ARF868 ULR



ARF868 ULR Integrated antenna	ARF7940AA
ARF868 ULR TNC antenna	ARF7940BA

Range	Up to 20km
Frequency	863-870MHz
Power	500mW
Radiated RF Power	27dBm
Number of channels	19 @2.4kbps/27dBm, +500 @2.4kbps/14dBm
Sensitivity	-120dBm
Modes	Transparent, Addressed, Repeater, Network, Legacy X3
RF Data rate	2.4 to 57.6kbps
UART data rate	1.2 to 115.2kbps
Serial port	RS232/RS485 autobaud
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

ARF868 LR



ARF868 LR Integrated antenna	ARF7941AA
ARF868 LR TNC antenna	ARF7941BA

Range	Up to 7km
Frequency	863-870MHz
Power	500mW
Radiated RF Power	27dBm
Number of channels	19 @2.4kbps/27dBm, +500 @2.4kbps/14dBm
Sensitivity	-112dBm
Modes	Transparent, Addressed, Repeater, Network, Legacy X3
RF Data rate	2.4 to 57.6kbps
UART data rate	1.2 to 115.2kbps
Serial port	RS232/RS485 autobaud
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

ARF868 MR



ARF868 MR Integrated antenna	ARF7942AA
ARF868 MR TNC antenna	ARF7942BA

Range	Up to 4km
Frequency	863-870MHz
Power	25mW
Radiated RF Power	14dBm
Number of channels	+500 @2.4kbps/14dBm, 60 @57.6kbps/14dBm
Sensitivity	-120dBm
Modes	Transparent, Addressed, Repeater, Network, Legacy X3
RF Data rate	2.4 to 57.6kbps
UART data rate	1.2 to 115.2kbps
Serial port	RS232/RS485 autobaud
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

ARF868 LP



ARF868 LP Integrated antenna	ARF7943AA
ARF868 LP TNC antenna	ARF7943BA

Range	Up to 1km
Frequency	863-870MHz
Power	25mW
Radiated RF Power	14dBm
Number of channels	+500 @2.4kbps/14dBm, 60 @57.6kbps/14dBm
Sensitivity	-112dBm
Modes	Transparent, Addressed, Repeater, Network, Legacy X3
RF Data rate	2.4 to 57.6kbps
UART data rate	1.2 to 115.2kbps
Serial port	RS232/RS485 autobaud
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

LICENCE-FREE RADIO MODEMS

ARF169 ULR



ARF169 ULR TNC antenna **ARF7944BA**

Range	Up to 15km (short whip antenna)
Frequency	169.4-169.6 MHz
Power	500mW
Radiated RF Power	27dBm
Number of channels	11@27dBm
Sensitivity	-122dBm
Modes	Transparent, Addressed, Repeater, Secured
UART data rate	1.2 to 115.2kbps
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

ARF53-915MHz



ARF53-915MHz Integrated antenna RS232 / RS485 **ARF7474CF**

ARF53-915MHz TNC antenna RS232 / RS485 **ARF7474EF**

ARF53-915MHz Integrated antenna USB **ARF7474GF**

ARF53-915MHz TNC antenna USB **ARF7474IF**

Range	Up to 6km
Frequency	902-928MHz
Power	500mW
Radiated RF Power	27dBm
Number of channels	50 FHSS
Sensitivity	-112dBm
Modes	Transparent, Addressed, Secured
UART data rate	9.6 / 57.6kbps
Supply voltage	4.5 to 36Vdc
Operating temperature	-30° / +70°C

WIFI® MODEMS

ARF45 PRO & ARF45



ARF45 PRO WEP64, WEP128, WPA-PSK, WPA2-PSK, WPA2- Enterprise **ARF7532K**

ARF45 WEP64, WEP128, WPA-PSK **ARF7532I**

Range	Up to 200m
Frequency	2.41-2.48GHz
Power	32mW
Sensitivity	-82dBm
Modes	Transparent
Serial port	RS232
UART data rate	2.4 to 921.6kbps
Set up & Configuration	RS232 - Telnet / HTTP
Supply voltage	8 to 30Vdc
Operating temperature	-30° / +70°C

UNDER LICENCED FREQUENCIES RADIO MODEMS

ARF73



ARF73 TNC antenna RS232 **ARF7499B**

ARF73 TNC antenna RS485 **ARF7499C**

ARF73 TNC antenna RS232 - STIF **ARF7499D**

Range	Up to 25km
Frequency	406-470MHz
Power	0.5 to 4W
Radiated RF Power	27 to 36dBm
Sensitivity	-115dBm
Modes	Transparent, Addressed, Repeater
RF data rate	4.8 / 9.6kbps
Serial data rate	9.6 / 115.2kbps
Serial port	RS232 or RS485
Supply voltage	10 to 28Vdc
Operating temperature	-30° / +70°C

WIRELESS M-BUS MODEMS / AMR RANGE

Transmitter Wireless M-Bus



W-MBus Transmitter AMR Gas	ARF7904xK
W-MBus Transmitter AMR Water	ARF7906xK

Radio transmission of meter data (consumption index)

RF Radiated power : 14dBm (25mW)
Range : up to 1000m
Extremely simple and fast installation
Up to two meters per transmitter
Up to 12 years of autonomy on battery (T1 - 10s)
IP65 and ATEX standards
Gas & Water version

Repeater Wireless M-Bus



W-MBus Repeater AMR Mains	ARF7923AA
W-MBus Repeater AMR Self powered	ARF7924AA

Radio repetition of Wireless M-Bus consumption indexes

RF Radiated power : 14dBm (25mW)
Sensitivity : -117dBm
Range : up to 1000m
Up to 200 products can be repeated (T1 mode), up to 60 products repeated (S1 mode), up to 30 products repeated (R1 mode)
Extremely simple and fast installation
Several repeaters can be associated
Mains or self-powered version
IP65 standard

Ambient Sensor Wireless M-Bus



AMR AMBIENT SENSOR	ARF8054AA
AMR AMBIENT REMOTE SENSOR	ARF8054BA
AMR AMBIENT SENSOR / AES-OMS	ARF8055AA
AMR AMBIENT REMOTE SENSOR / AES-OMS	ARF8055BA

Wireless M-Bus Ready-to-use room temperature transmitter

RF Radiated power: 10dBm (10mW)
Range: up to 300m
Measured temperature: from -30° to 95°C
Wireless M-Bus modes: T1 (other on option)
AES128 encryption compliant OMS mode 5 (option)
Extremely simple and fast installation
Lifespan: 11 years of operation
Standards: EN 300-220, EN 301-489, EN 13757- 4:2005, OMS 3.0.1

Temperature Sensor Wireless M-Bus



W-MBus Transmitter TEMP	ARF7904AA
W-MBus Transmitter TEMP + external NTC	ARF7906AA

Radio transmitter to capture temperature measurements

RF sensitivity : up to -110dBm
Extremely simple and fast installation
Internal and external temperature sensor
Range of up to 600 m (T1 mode)
Battery life of up to 12 years
IP53 standards

WIRELESS M-BUS MODEMS / AMR RANGE

HCA UNITY1 Wireless M-Bus



HCA UNITY1	Compact AES-OMS	ARF8050AA
HCA UNITY1	Compact	ARF8050BA
HCA UNITY1	Remote sensor AES-OMS	ARF8051AA
HCA UNITY1	Remote sensor	ARF8051BA

Wireless M-Bus Heat cost allocator «Unity Scale»

RF Radiated power: 3dBm (2mW)

Range: up to 300m

Measured temperature: from 5° to 95°C (EN834)

Wireless M-Bus modes T1 and S1

AES128 encryption compliant OMS mode 5

Extremely simple and fast installation

Lifespan: 1 year of storage and 11 years of operation

Standards: EN 300-220, EN 301-489, EN 60950, EN 13757-4:2005, EN834

USB Dongle Wireless M-Bus



DONGLE USB WMBUS AMR	ARF8020AA
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USB Wireless M-Bus transmitter/receiver

RF radiated power : 14dBm (25mW)

Range : up to 200m

Extremely simple and fast installation

W-Mbus modes : R1, R2 / S1, S1-m, S2 / T1, T2

Power supply : 5V/USB

Standards : EN 300-220, EN 301-489, EN 60950, EN 13757-4:2005

Receiver Wireless M-Bus



W-MBus Receiver AMR	RS232	ARF7922BA
W-MBus Receiver AMR	RS485	ARF7922CA
W-MBus Receiver AMR	USB	ARF7922EA

Radio reception of Wireless M-Bus consumption indexes

RF sensitivity : -117dBm

Extremely simple and fast installation

RS232 or RS485 serial port, USB port

Mains power supply

External antenna

IP65 standard

Gateway W-MBus/GPRS



AMR GATEWAY BATTERY / INT.ANTENNA	ARF8011AA
AMR GATEWAY BATTERY / EXT.ANTENNA	ARF8011BA
AMR GATEWAY MAINS / INT.ANTENNA	ARF8015AA
AMR GATEWAY MAINS / EXT.ANTENNA	ARF8015BA

W-MBus data collector / GPRS transmission

RF Radiated power : 14dBm (25mW)

Range : up to 1000m (W-MBus)

Extremely simple and fast installation

GSM/DCS GPRS module

Lifespan self-powered version: up to 5 years

IP67 and IK8 standards

Mains or self-powered version

I/O MODULES

ARF51 PRO



ARF51 PRO 4 digital I/O + 2 analog I/O	ARF8029BA
Range	Up to 20km (integrated RF 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 36Vdc
UART data rate	9.6 / 57.6kbps
Bus	RTU Modbus
Operating temperature	-10°/+70°C

ARF51



ARF51 4 digital I/O	ARF8029AA
Range	Up to 20km (integrated RF modem)
I/O refreshing rate	from 100ms
Digital Inputs	0/40V NPN
Digital Outputs	0/40V PNP
Supply voltage	10 to 36Vdc
UART data rate	9.6 / 57.6kbps
Bus	RTU Modbus
Operating temperature	-10°/+70°C

ARF50 PRO & ARF50



ARF50 PRO 4 digital I/O + 2 analog I/O	ARF7663BA	
ARF50 4 digital I/O	ARF7663AA	
	ARF50 PRO	ARF50
Range	Up to 25km (depending on radio modem connected)	
I/O refreshing rate	from 100ms	from 100ms
Digital Inputs	0/40V NPN	0/40V NPN
Digital Outputs	0/40V PNP	0/40V PNP
Analog Inputs/Outputs	12 bits 0/20mA or 0/10V voltage	
Supply voltage	10 to 36Vdc	10 to 36Vdc
UART data rate	9.6 / 57.6kbps	9.6 / 57.6kbps
Connection to modem & supervisor	RS485	RS485
Bus	RTU Modbus	RTU Modbus
Operating temperature	-10°/+70°C	-10°/+70°C

BLUETOOTH® DONGLES

ARF62



ARF62 DCE/DB9F + power supply	ARF7501B
ARF62 DTE/DB9M + power supply	ARF7502B
ARF62 DTE/DB15HD M + self-powered	ARF7503C
ARF62 DCE/DB9F + DTE/DB9M	ARF7509A
Range	Up to 150m
Frequencies	2.41-2.45GHz
Sensitivity	-87dBm
RF data rate	Up to 723kbps
Serial port	DCE/DB9 - DTE/DB15
Profiles	GAP - SDAP - SPP - DUN
Size	65 x 20 x 25mm

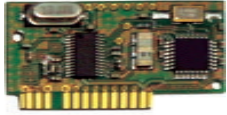
REMOTE CONTROL 433MHz - 1 way

ARF18



ARF18 remote control 1 key	ARF7291A
ARF18 remote control 2 keys	ARF7291B
ARF18 remote control 4 keys	ARF7291D
ARF18 remote control 8 keys	ARF7291R

Range	150m
Frequency	433.92MHz
Power	1mW
Operating temperature	-30° / +70°C



ARF18 OEM Receiver	ARF7293A
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Sensitivity	-104dBm
Frequency	433.92MHz
Consumption	15mA
Outputs	Serial interface level, 0/VCC
Power supply	2.7-3.6V



ARF18 Receiver 1 relay NO/NC	ARF7341F
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ARF18 Receiver 2 relays 1NO + 1NO/NC	ARF7341D
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ARF18 Receiver 4 relays NO	ARF7341B
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ARF18 Serial decoder RS232	ARF7263K
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ARF18 Serial decoder USB	ARF7263S
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Sensitivity	-104dBm
Frequencies	433.92MHz
Consumption	16mA (RS232) - 32mA (USB)
Power supply	8 to 30V
Enclosure	IP65 box
Operating temperature	-30° / +70°C

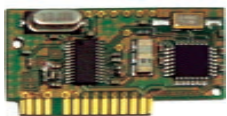
REMOTE CONTROL 869MHz - 2 ways

ARF18



ARF18 remote control 1 key	ARF7292A
ARF18 remote control 2 keys	ARF7292B
ARF18 remote control 4 keys	ARF7292D

Range	300m
Frequency	869.525MHz
Power	6mW
Operating temperature	-30° / +70°C











ARF18 OEM Receiver	ARF7294A
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Sensitivity	-104dBm
Frequency	869.525MHz
Consumption	15mA
Outputs	Serial interface level, 0/VCC
Power supply	2.7-3.6V





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	ACC1400AO
	Antenna 1/2 Wave	425/455MHz	5dBi	38 cm	ACC1400AP
	Antenna 1/2 Wave	445/470MHz	5dBi	36.5 cm	ACC1400AQ
	Dual-band GPS/ISM groundplane antenna	869MHz - GPS	2dBi	6.8 x 4.8 x 4 cm	ACC1400AU
	Dual-band GPS/ISM groundplane antenna	410/430MHz - GPS	2dBi	diam: 16 cm	ACC1400AS
	Groundplane antenna	410/430MHz	2dBi	diam: 16cm	ACC1400AE


Antenna adapters & supports

	Designation	TNC Connector type	Size	Part Nb
	TNC converter package	1 Male/Male + 1 Female/Female	-	ACC1400AM
	Fixing system for antenna	Male/Female adapter	10 x 10 x 3 cm	ACC1400AN
	DIN Rail fixing system for ADEUNIS RF IP65 boxes	-	-	ACC1400AT
	Fixing system for antenna + antenna + cable	Male/Female adapter	-	ACC1400DX (for ARF51)

Antenna cables



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

Power blocks



	Designation	Connector type	Size	Part Nb
	Power block - 100- 240V - 50/60Hz - 250mA 9V	For ARF868 modems with lockable jack connector	200cm	ACC1500AC

ACCESSORIES




IP Protection for ARF868 modems

	Designation	Part Nb
	IP53 Protection for ARF868 modem	ACC1500AD
	IP67 Protection for ARF868 modem	ACC1500AE





Bracket accessories for ARF868 modems

	Designation	Part Nb
	Wall mount for ARF868 modem	208816
	Tube mount for ARF868 modem	208815

Miscellaneous for ARF868 modems

	Designation	Part Nb
	Lockable Jack connector for ARF868 modem	ACC1500AA
	Clamping tool for ARF868 modem Jack connector	208820
	RS485 adaptor with polarization switch and terminal	ACC1500AH

Data & Power cables

	Designation	Connector	Size	Part Nb
	Cable	USB to serial converter for ARF868 modem	150 cm	ACC1500AB
	4-wire cable for ARF50	4-wire WAGO terminal block to breakout cable	75 cm	ACC1400BK
	4-wire cable for ARF50	4-wire WAGO terminal block to breakout cable	200 cm	ACC1400BL
	4-wire cable for ARF50 chaining		100 cm	ACC1400BV

NOTES

About ADEUNIS RF

ADEUNIS RF is a French industrial company specialized in the design, manufacture and sales of communicating products and wireless solutions, ready-to-use, dedicated to M2M markets.

For over 20 years, ADEUNIS RF supports its international customers with products using the latest technologies and implementation of innovative solutions.

ADEUNIS RF's offer replies to needs and applications, dedicated to infrastructure & networks, for the markets of the industry, energy, transportation, sports, general public....

Services & skills

Skills area

Solutions using Wireless M-Bus, Bluetooth, Wifi standards
Worldwide ISM bands
RF solutions from kHz to GHz
Low consumption products
Network - 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, EN13757 EN60950 ...



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