

RADIO MODEMS RANGE



Wireless data transmission



Radio modems description

Integrated antenna version or TNC connector for external antenna



Status LEDs



Configuration and service through buttons

Integrated DIN-Rail mount



Power supply jack connector

SubD9 socket - RS232/485/USB

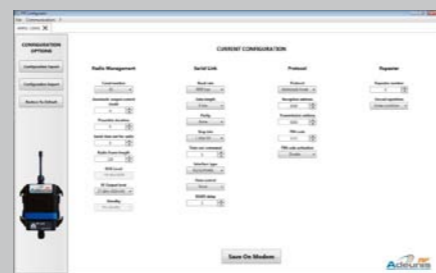
IP53 and IP67 options

Water and dust protection



Configuration manager software

Easy implementation



Markets - Applications

Industry



Wireless systems for :

- Industrial machine control
- Automatic system monitoring
- Troubleshooting detection
- Positioning / Tracking
-

Energy - AMR



Wireless systems for :

- Energy remote reading
- Urban heating control
- Buildings energy management
- Cartography and regulation
-

Transportation



Wireless systems for :

- Control of traffic light priority
- Information for travellers
- Electronic displaying
- car park and vehicle management
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Security & control



Wireless system for :

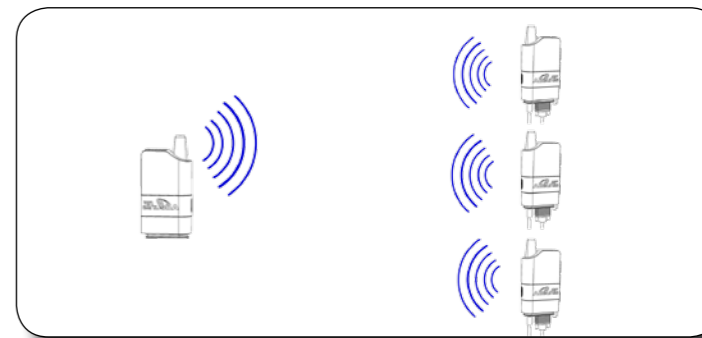
- Building security
- Access control to sites and zones
- Emergency beacons
- Home automation applications
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Communication modes

Transparent Mode

Data are sent into the air and all products are recipients of the frames transmitted.

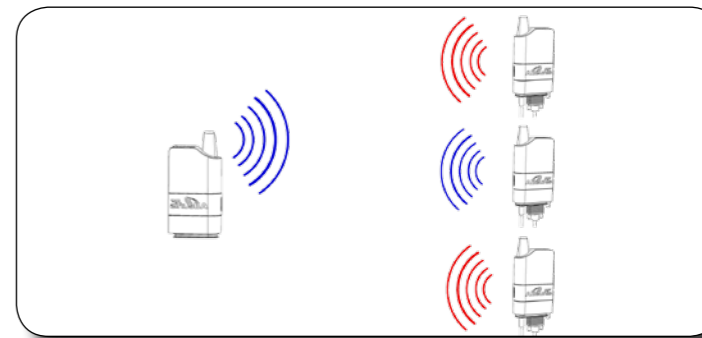
- Continuous or packetized data transmission
- Transmission integrity control (packetized mode)



Addressed Mode

Data are sent into the air and only the addressee receives the frames from the transmitting product.

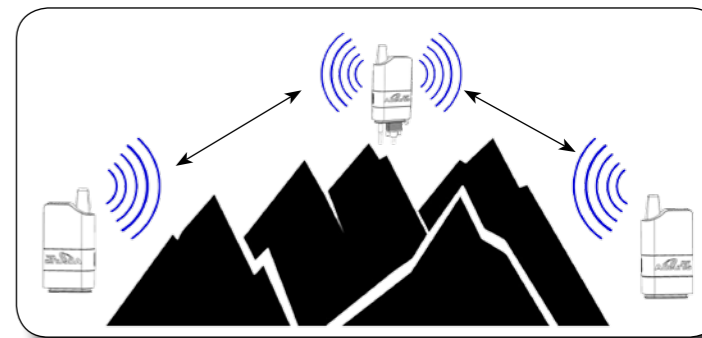
- Continuous or packetized data transmission
- Transmission integrity control (packetized mode)
- Secured packet protocol (ACK)



Repeater Mode

Data are sent into the air and are repeated after checking the availability of the radio channel.






- Packetized data transmission
- Transmission integrity control



Ranges



Technical specifications

Products	ARF868 LP	ARF868 MR	ARF868 LR	ARF868 ULR	ARF169 ULR
					
Range	1 km	4km	7km	20km	15km
Integrated antenna reference	ARF7943AA	ARF7942AA	ARF7941AA	ARF7940AA	-
External antenna reference	ARF7943BA	ARF7942BA	ARF7941BA	ARF7940BA	ARF7944BA
Radio characteristics					
Frequencies	863-870MHz	863-870MHz	863-870MHz	863-870MHz	169.4-169.59MHz
RF Power	14dBm	14dBm	27dBm	27dBm	27dBm
Power	25mW	25mW	500mW	500mW	500mW
Sensibilité RF	-112dBm	-120dBm	-112dBm	-120dBm	-122dBm
RF data rates	2.4 to 57.6kbps	2.4 to 57.6kbps	2.4 to 57.6kbps	2.4 to 57.6kbps	2.4 to 38.4kbps
Channel number	14dBm/2.4kbps : 506 14dBm/9.6kbps : 249	14dBm/2.4kbps : 506 14dBm/9.6kbps : 249	27dBm/2.4kbps : 19 14dBm/2.4kbps : 506	27dBm/2.4kbps : 19 14dBm/2.4kbps : 506	27dBm : 10
Consumption	100mA (TX@14dBm / 12V)		240mA (TX@27dBm / 12V)		
Modem interface					
Serial data rates	1.2-115.2kbps	1.2-115.2kbps	1.2-115.2kbps	1.2-115.2kbps	1.2-115.2kbps
Serial port	RS232 / RS485 / USB	RS232 / RS485 / USB	RS232 / RS485 / USB	RS232 / RS485 / USB	RS232 / RS485 / USB
Modes	Transparent Addressed Repeater Network	Transparent Addressed Repeater Network	Transparent Addressed Repeater Network	Transparent Addressed Repeater Network	Transparent Addressed Repeater
Configuration	Adeunis RF software AT Commands	Adeunis RF software AT Commands	Adeunis RF software AT Commands	Adeunis RF software AT Commands	Adeunis RF software AT Commands
General information					
Dimensions	135 x 75 x 35mm (Integrated antenna)	135 x 75 x 35mm (Integrated antenna)	135 x 75 x 35mm (Integrated antenna)	135 x 75 x 35mm (Integrated antenna)	135 x 75 x 35mm (Integrated antenna)
Casing	IP41	IP41	IP41	IP41	IP41
Weight	155gr	155gr	155gr	155gr	155gr
Operating temperatures	-30° to -70°C	-30° to -70°C	-30° to -70°C	-30° to -70°C	-30° to -70°C
Standard	EN300-220 V2010 EN301-489 EN60950	EN300-220 V2010 EN301-489 EN60950	EN300-220 V2010 EN301-489 EN60950	EN300-220 V2010 EN301-489 EN60950	EN300-220 V2010 EN301-489 EN60950

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