Adeunis RF
Wireless products & solutions

ARF53

500mW multi-channel radio modem RS232/RS485 or USB - WITHOUT LICENCE

The ARF53 enables **two-way half duplex wireless data transmission** over a range of **6000 m.**
It integrates a **multi-channel radio transceiver, a digital processing unit and a wide power supply range** on the same board.
Available as an **IP65 enclosure ready for approved use,** this modem uses the **869MHz** (Europe) band according to the European directive RTTE EN300-220/EN 301-489 or the **902/928MHz** (United-States) band according to the FCC Part 15.247 and is **approved.**
Data transfer is performed via an **RS232/RS485 serial port or USB interface.**
Configuration is performed by **AT commands**.
It can be used **WITHOUT A LICENCE** and covers most **"long-distance" wireless data transmission** applications, from remote meter reading type **point to point transmission** to constitution of **cordless multipoint local networks**, in sectors of activity such as **automation**, robotics, **remote management**... and more generally **all types of applications requiring long range or in a particular disturbed environment :** automatic piloting of buses traffic lights, urban traffic control extension....

Specifications

	869MHz version (Europe)	915MHz version (USA)
RF		
• Programmable frequencies	**869.400 to 869.650MHz**	**902 to 928MHz**
• Radiated RF power	**500mW (+27dBm)**	**Idem**
• Sensivity	**-108dBm (WB) -112dBm (NB)**	**Idem**
• Number of channels	**1 (WB) - 3 (NB)**	**FHSS/50**
• RSSI	**Available through AT commands**	**Idem**
• Radio data rate	**57 600 bits/s (WB) 10 000 bits/s (NB)**	**Idem**
• Embedded Protocols	**ADEUNIS RF enhanced & versatile RF comms manager**	**Idem**
• Embedded Profiles	**Multimode modem**	**Idem**
Modem interface		
• Serial link rate	**1.2 à 57.6kbps**	**Idem**
• Serial ports	**RS232 (TxD, RxD, RTS, CTS) or RS485** **USB 'virtual port COM'**	**Idem**
• Flow control	**None or RTS/CTS**	**Idem**
• Configuration	**Through AT commands**	**Idem**
• Modes	**Transparent or addressed**	**Addressed Secured**
General informations		
• Supply voltage	**4.5 to 36V**	**Idem**
• Consumption	**3W in transmission / 0.27W in recept**	**Idem**
• Operating temperature	**-30 / +70°C**	**Idem**
• Range	**6000 m in free field**	**Idem**
• Size	**145 x 100 x 40mm + 85mm antenna**	**Idem**
• Packaging	**IP65 box**	**Idem**
• Standard compliance	**RTTE EN300-220 / EN301-489 (full certified modem)**	**FCC Part 15.247**

Part Numbers

868/870MHz	915MHz	
ARF7474D	**ARF7474C**	RS232/485 modem - IP65 box integrated antenna
ARF7474F	**ARF7474E**	RS232/485 modem - IP65 box remote antenna (*)
ARF7474H	**ARF7474G**	USB modem - IP65 box integrated antenna
ARF7474J	**ARF7474I**	USB modem - IP65 box remote antenna (*)

* Through RG58C cable + TNC connector

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Your distributor

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