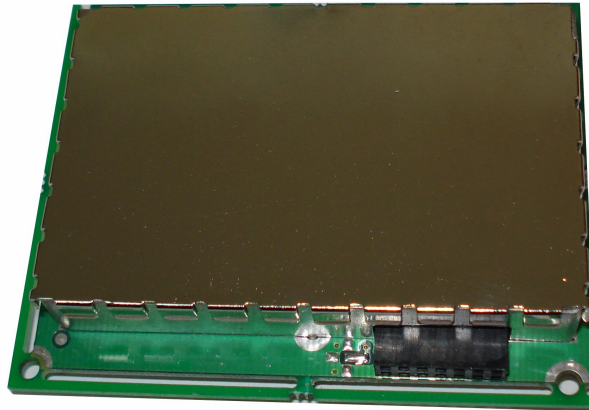


ARX

Paging & Data Receiver Modules

The ARX Series of receiver modules are high quality, cost effective, low current, synthesized, narrow band VHF, UHF & 900MHz products for mobile or base station operation in the paging & data markets. The products have been designed for mounting directly into client's products with the minimum amount of fuss and using a minimum number of connections.



MOUNTING

The ARX is a self contained module, screened top and bottom, with 4 hole mounting using stand-offs for attaching to a PCB or back plane.

PERFORMANCE

The ARX receivers have high level solid state mixers to give good intermodulation performance with low current consumption. IF filtering is achieved by a four pole crystal filter at 45MHz and a further 4 pole low group delay ceramic filter at 455kHz. Frequency stability is ± 1.5 ppm over the range -30degC to +60degC as standard, or ± 1 ppm as an enhanced option.

CONTROL INTERFACE

The ARX is designed to interface with an external microprocessor for channel change & RSSI measurement, or we can provide an interface board with a PIC processor for channel change and RSSI reporting. Alternatively the RSSI is available as a voltage (0-5VDC) indicating the received signal strength. This voltage can be used to decide if the link path is acceptable.

DEMODULATION INTERFACE

The modulation input is DC coupled with filtering for 12.5kHz, 20kHz, 25kHz or 30kHz so it can be used with many different forms of data.

TECHNICAL SPECIFICATIONS

Frequency Range:	ARX170-R	138 - 172MHz
	ARX470-R	406 - 470MHz
	ARX900-R	850 - 950MHz
	Special order:	any 5MHz slot 45-900MHz
Programmable Bandwidth:	UHF/900MHz	20MHz slot within the band
	VHF	5MHz slot within the band
Power Requirements:	Voltage: 5VDC (12VDC is available as an option). Current: 35mA @5VDC	
Number of Channels:	Any number within the programmable bandwidth	
Min. Programmable Channel Step:	6.25 or 5kHz	
Channel Spacing:	12.5kHz, 20kHz, 25kHz or 30kHz	
Operating Temp.:	-30°C to +60°C	
Frequency Stability:	±1.5ppm over -30°C to +60°C (±1ppm Optional)	
Size:	80mm W x 63mm D x 20mm H	
Weight:	Approx 120gms	
Connectors:	Interface: 7 + 7 dual in-line 0.1inch Pitch pins Antenna: Coax with free right angle chassis mount BNC socket, or board mounted MCA	
Approvals:	Capable of meeting the following: European RF: EN 300-086 / EN 300-220 / EN 300-113 / EN 300-224 European CE: EN 301-489 USA: FCC Part 90/15 Canadian: IC	
Sensitivity:	Typically -121dBm for 12dB SINAD	de-emphasised response
	Typically -118dBm for 12dB SINAD	flat response
Spurious Response:	>77dB	
Blocking:	>95dB relative to 1µV	
Intermodulation:	>70dB	
Adjacent Channel:	>65dB at 12.5kHz	
IF Frequencies:	45MHz and 455kHz	
Spurious Emissions:	To EN300-086/220/113/224	
Signal Output:	250mV peak to peak	
RSSI Output:	0-5VDC for -120dBm to -40dBm	
Mute Response Time:	<3ms	

In the interest of improvement the above specifications are subject to change without notice.

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