

ZODIAC D4000 R



Zodiac D4000 R - ANALOG / DIGITAL DMR REPEATER

Zodiac D4000 R adopts the latest digital technologies, which results in a high quality product which is easy to use and very cost effective.



Zodiac D4000 R - Art. nr. 31079

FEATURES

Cost-effective DMR Repeater

This easy to use repeater is designed to save your cost and provide you with a basic and reliable repeater. We omit many high-end applications which you probably did not need in a long term to save your cost and improve the reliability, such as IPSR(Network interconnect via the IP port of repeater), Remote diagnostic, Telephone Interconnect, Front control panel, etc.

Digital-Analog Switch Automatically

This repeater supports digital and analog modes. It can recognize the inbound signal and repeat the signal automatically.

Advanced TDMA Technology

The Time Division Multiple Access (TDMA) technology allows twice (2 Time Slot Capability) user channels compared with that traditional FDMA. It can not only save the cost of buying base stations and frequency license, but also relieve the pressure of increasing shortage in spectrum resources.

Transparent for Vocoder & Data

This repeater will pass any voice based on any kind of vocoders or any data, only if it is compatible with ETSI TS 102 361-1,-2,-3.

Cross-band repeater

This repeater is able to do a cross-band when order, such as VHF-UHF or reverse. Please contact technical sales support to order.

DMR TIER II

The repeater supports DMR TIER II and makes it suitable for use with other brands that are using analog FM or DMR mode.



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SPECIFICATIONS

GENERAL

Power Supply	13.8V DC \pm 20%
Frequency Range	400~470MHz, 450~520MHz
Number of Channels	1 Channels
Channel Spacing	12.5/25kHz
Operating Temperature	-30°C~+60°C
Antenna Impedance	50 Ω
Duty Cycle	100%
Dimensions: HxWxD (mm)	136.6x440x322
Weight: (kg)	10.0 (with duplexer)

TRANSMITTER

Frequency Stability (-30°C to 60°C, 25°C Ref)	1.0 ppm
Power Output	5W (L), 25W (H)
Modulation Limiting	\pm 2.5kHz@12.5kHz/ \pm 5kHz@25kHz
FM Hum & Noise	-40dB@12.5kHz / -45dB @ 25kHz
Conducted/ Radiated Emission	-36dBm<1GHz, -30dBm>1GHz
Adjacent Channel Power	-60dB@12.5kHz; -70dB@12.5kHz
FM Modulation Mode	11K0F3E@12.5kHz; 16K0F3E@25kHz
4FSK Digital Mode	12.5KHz(data only):7K60FXD 12.5KHz(data+voice):7K60FXE
4FSK Modulation Accuracy	5% @25°C, 10% @extreme temperature
Audio Response (300-3000Hz)	+1~-3dB
Digital Protocol	ETSI TS 102 361-1,-2,-3
Audio Distortion	<3%
Vocoder	Transparent (AMBE++, SELP, etc.)

RECEIVER

Analog Sensitivity	0.35 μ V/-116dBm (20dB SINAD) 0.22 μ V/-120dBm (12dB SINAD)
Digital Sensitivity	0.3 μ V/-117.4dBm (BER 5%) 0.7 μ V/-110dBm (BER 1%)
Intermodulation	TIA603 70dB; ETSI 65dB
Adjacent Channel Selectivity	TIA603 70dB; ETSI:65dB@25KHz TIA603 60dB; ETSI 60dB@12.5KHz
Spurious Rejection	TIA603:75dB; ETSI:70dB
Blocking	84dB
Audio Distortion@Rated Audio	5%
Audio Response (300-3000Hz)	+1~ -3dB
Conducted Spurious Emission	-57dBm<1GHz, -47dBm>1GHz ETS300086

