

PRM 4

Packet Radio Modem

Highlights

- Packet radio modem for ISM 868MHz frequency range
- Serial interface RS-232 DCE
- Serial interface RS-422 or RS-485, 2 wire or 4 wire, with or without termination
- Range up to 2km with rod antenna and up to 16km with high gain antenna
- LED indications for power supply, receive, transmit and error in channel
- Optional mounting for 35mm DIN rail



Description

PRM 4 is packet radio modem intended for wireless transfer of serial protocols in unlicensed ISM 868MHz frequency range. It has RS-232 DCE, as well as two wire or four wire RS-422 or RS-485 interface. On front panel there are LED indications for power supply, receive, transmit and error in channel. Range up to 2km is achieved with small rod antenna and up to 16km with high gain antenna. Device power supply range is 8-32Vdc. PRM 4 is shipped in desktop version or with optional 35mm DIN rail mounting carrier.

Application

Packet radio modem of fourth generation can be used in industrial environment where there are no conditions for wire interconnecting of communication equipment, as it is with moving and rotating machines, natural and artificial barriers, as well as in situations where simple and fast interconnection is requested without mounting of additional wires. It enables interconnection of several communication devices in wireless network, with range extension thanks to repeater working mode. AT command interface is intended for parameters setting.

Technical specification

Frequency range	ISM 868MHz, according to EN 300 220
Channel range and number	25kHz, 80 channels
Transmit power	+13dBm, 20mW
Modulation	2FSK with Gaussian filtration
Radio signaling rate	9600bps
Receiver sensitivity	better than -115dBm for 10^{-3} BER
Channel occupation time	less than 1%
Range	up to 2km with rod antenna, 16km with high gain antenna
Serial interface	8 data, None parity, 1 stop bit 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Serial connector DB9 DCE	RS-232: Tx, Rx, RTS, CTS, DTR, DSR, DCD, RI, GND RS-422: Tx+, Tx-, Rx+, Rx-, GND (2W/4W selectable) RS-485: Tx+, Tx-, Rx+, Rx-, GND (2W/4W selectable) Termination 120 Ohm for RS-422 and RS-485 selectable
Power supply	8-32Vdc, 2W
LED indications	power supply, receive, transmit, error in channel
Temperature range	-20°C to +75°C, 0 to 95% RH (non condensing)
Protection	IP50
Dimensions	86 x 57 x 26 mm
Mounting	desktop or optional mounting for 35mm DIN rail

DECODE d.o.o.

Bulevar Nikole Tesle 30A

11080 Belgrade, Serbia

Tel: +381 11 311 0027

E-mail: office@decode.rs

www.decode.rs

Legal notice

Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission is prohibited. All rights reserved. All trademarks mentioned herein belong to their respective owners.

Copyright © 2018 Decode

Disclaimer

Decode has used reasonable care in preparing the information included in this document, but does not warrant that such information is error free.

Decode, its associates, representatives, employees, and others acting on its behalf disclaim any and all liability for errors, inaccuracies, or incompleteness contained in any datasheet or in any other disclosure relating to any product.

In the interest of continuous product development, the Decode reserves the right to make improvements to this manual and the products described in it at any time and without prior notification or obligation.

The use of the product is at sole discretion of the user. Decode cannot be held responsible for any damages arising due to use of this product and makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product.

Note: The specifications in this document are valid as of the listed versions of software and/or hardware. Revised versions of this document, as well as software and driver updates are available in the download area of the Decode web site.