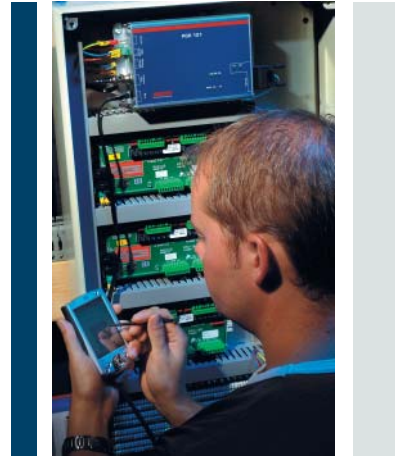
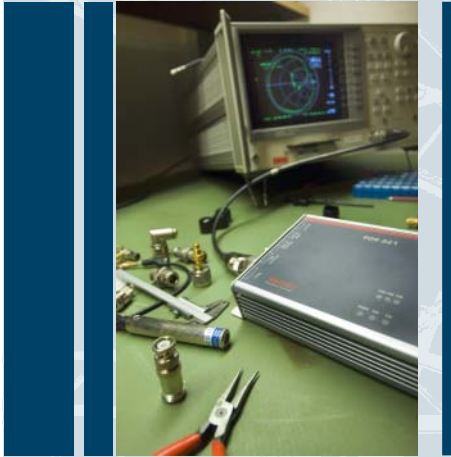


## RADIUS PDR 221

Advanced digital radio for wide area communication



### BENEFITS:

- Wide Area Coverage
- Protocol Decoding
- 19.2 kbps
- Proven Reliability
- Collision Avoidance Technology
- Build-in Network Management Tools

*Radio communication is a safe, reliable and cost efficient solution when you want to establish an independent communication network. Radius PDR 221 is designed to work in extremely demanding surroundings and at the same time be easy to use - and always online.*

### SMART AND COMPACT DESIGN

Due to Radius' compact and smart design, your network will still work even under the most severe environmental conditions. It is also proven to be reliable even when external disturbances, like a power failure or problems with the GSM-network, are apparent.

### COMPATIBLE DESIGN

Radius PDR 221 is an advanced digital radio for point-to-multipoint-, point-to-point-

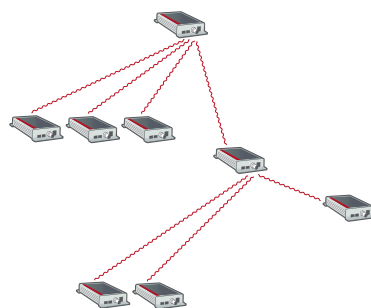
and peer-to-peer-communication. The PDR works in both licensed and unlicensed VHF/UHF bands.

### WIDE AREA COVERAGE

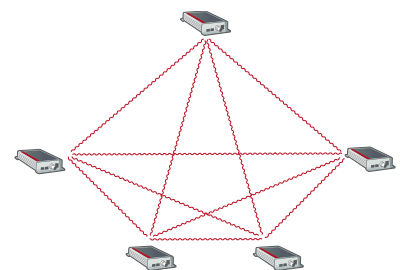
PDR 221 is transparent and protocol independent. Each master can handle up to 255 slaves and because of the fact that the radio does not buffer messages; the transmitted information is handled fast and effective. PDR 221 has built-in test functions for commissioning and is easy to use and configure.

### SAFE SYSTEM

The PDR 221 radio design truly offers real-time secure communications with its high in air data rates and fast data turn around



TRANSPARENT



PEER TO PEER

**RADIO TRANSCEIVER**

Data Rates	4800/19200 @ 12.5 KHz 9600/19200 @ 25 KHz
Frequency Range	UHF 435...470 MHz VHF 132...174 MHz Other bands available on request
Operation modes	Half duplex, Simplex
Modulation	4 level FSK
Forward Error Correction	Yes, interleaving functionality
Collision avoidance	Yes, user configurable
Repeating	Multi-repeating, up to 6 repeaters on one link
No of remote radios per master	255
Compliances	ETSI 300220, ETSI 300113, MPT1411, FCC

**RADIO TRANSMITTER**

Tx power	0.1...2.0 W 2.0...20 W on request
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**RADIO RECIEVER**

Sensitivity	-107...-114 dBm @ BER <10-6 Depending on data rate and channel spacing
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**SERIAL INTERFACE RS232**

Data Rates	600...19200 bps
Flow Control	RTS/CTS, DCD selectable

**PROTOCOLS**

Transparent. Manage all on market existing protocols. (DNP3, IEC870, RP570, COMLI, Modbus, Wisp, Exoline, Aquacom...)

**NETWORK DIAGNOSTICS**

RSSI, temperature etc

**POWER SUPPLY**

Operating Voltage	11.5...13.5 VDC Nominal
Current Consumption	Standby/Receive 165 mA Transmit 1100 mA vid 2 W Tx Power

**ENVIRONMENTAL**

Temperature Operation Range -40°C to +60°C (-40°F to +140°F)

**PHYSICAL DIMENSIONS**

Size	H165XW113XD40 mm (6.5X4.5X1.6 inch)
Weight	600 g (1.3 lb)
Housing Material	Extruded Aluminium

**CONNECTORS**

Main Power Supply	2 pole, female
Battery Supply	2 pole, female
Antenna	BNC, female
Serial Port	RS232 DB9 female, wired as DCE (modem)
Configuration	RJ12, female

**INDICATIONS (LED)**

Main PWR, Radio Rx, Radio Tx, RS232 Rx, RS232 Tx, Configuration Mode, Carrier Detect, System Detect

**CONFIGURATIONS INTERFACE**

Configuration software	Standard Windows Terminal Software
Data Rate	Selectable 1200/9600/57600 bps

Radius reserves the right to alter specifications without prior notice.

106r02

Putting you in control



www.radius.net



Radius develops complete systems for effective distribution automation in order to strengthen our global customer's position within deregulated markets.