

PDR8000 Rackmount Repeater

Coverage where you need it



Poor radio coverage can put your team at risk. Enhance two-way radio coverage for special ops and security detail teams with the PDR8000® Rackmount Repeater.

The PDR8000 Rackmount Repeater is designed to be permanently installed in a desired location as either a standalone repeater or a site extender to provide radio coverage in difficult areas. The PDR8000 Rackmount Repeater can be linked to your Motorola Solutions dispatch console wherever it may be via V.24 or Ethernet IP (analog or P25) backhaul connection.

→ Key features and benefits

- Available in VHF and UHF bands
- Front display control panel interface
- 50-Watt power amplifier (optional)
- Deployment profiles capable (optional)
- End-to-end encryption supported
- Voting and comparator operation
- Wireline Ethernet IP connection to consoles supporting Digital Fixed Station Interface Protocol Version 1 (analog and digital) (optional)
- Fits into standard 19" Rack
- Requires 13.8V +/-20% power (customer supplied)
- Alarms (optional)

→ Applications and uses

- RF coverage dead zones
- Incident Command
- State or Provincial parks
- Remote utility sites such as power stations and water stations



PDR8000 specifications

GENERAL SPECIFICATIONS	
Dimensions: Height / Width / Depth	10 1/2" x 19" x 15 3/4" (267 mm x 483 mm x 400 mm) 6 RU
Approximate Weight	
<ul style="list-style-type: none"> Without Power Amplifier With Optional 50W Power Amplifier^{1,2} 	26 lbs (11.8 kg) 31 lbs (14.1 kg)
Channel Spacing	Digital 12.5 kHz Analog 12.5 or 25 kHz programmable
Number of Channels	64
With Deployment Profiles Option	64 per profile, max 10 profiles
Power Supply	13.8V DC +/- 20%
DC Current Drain	
<ul style="list-style-type: none"> Standby/Receive Transmit (Without Power Amplifier) Transmit (With Power Amplifier) 	1.0A Max 7.0A Max 11.5A Max
Operating Temperature	-30°C to +60°C
Antenna Impedance	50 Ohms
Duty Cycle	Continuous
External Connectors - Front	
<ul style="list-style-type: none"> Computer Interface V.24 LAN Ground 	USB RJ-45 Type RJ-45 Type Stainless steel stud, 0.5" long with 10-32 thread
External Connectors - Back	
<ul style="list-style-type: none"> RF Connector(s) DC Input Ground Alarm (Optional) 	N Female Terminal Block Ground Stud Terminal Block



TRANSMITTER SPECIFICATION	VHF	UHF
Frequency Band [MHz]	136-174	380-430 450-470
Power Output @ Antenna Port (without duplexer)	18W	16W
<ul style="list-style-type: none"> Without 50W Amp With 50W Amp¹ 	50W	50W ²
TOT Option	10 seconds to 2550 seconds or Disabled	
Max Spurious Output	-20dBm	
Frequency Stability (-30 °C to +50 °C; +25 °C Ref.)	± 1.5ppm	
FM Hum and Noise 12.5 kHz	-37dB	

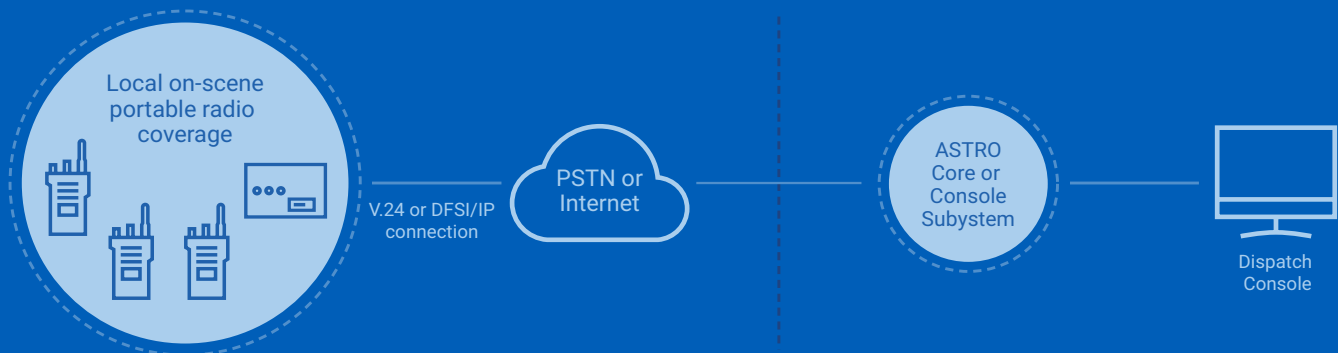
RECEIVER SPECIFICATION	VHF	UHF
Frequency Band [MHz]	136-174	380-430 450-470
Receiver Sensitivity (simplex/duplex)	-115 dBm	
Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)	± 1.5ppm	
Selectivity 12.5 / 25 kHz	-60 dB / -75 dB	
Intermodulation	-70 dB	
Deviation 12.5 / 25 kHz	± 2.5 kHz / ± 5 kHz	

EQUIPMENT TYPE ACCEPTANCE	VHF	UHF
FCC	136-174 MHz L06-DVRSVHF	380-406 MHz 406.1-512 MHz L06-DVRSUHF
Industry Canada	138-174 MHz 2098B-DVRSVHF	406.1-430 MHz 450-470 MHz 2098B-DVRSUHF

1. Optional power amplifier mounts in the same rack as PDR8000
2. 50W power amplifier is not available in UHF in Canada

Specifications are typical, measured under nominal conditions and are subject to change without notice





Incident command

Ensure reliable communications and coordination during special security events and emergency incidents.



State and Provincial parks

Establish reliable communications and increase the safety for visitors and park staff in remote areas.



Remote facilities

Stay connected to your team while at remote facilities such as water treatment plants and power stations.

To learn more, visit: www.motorolasolutions.com/pdr8000



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