



PDR8000 PORTABLE DIGITAL REPEATER



MOTOROLA SOLUTIONS



FUTURECOM
SYSTEMS GROUP, ULC



PDR8000 PORTABLE DIGITAL REPEATER

Special ops and security detail teams requiring enhanced Conventional two-way radio network coverage can look to the PDR8000™ Portable Digital Repeater as their solution of choice when on the move. Designed with these special teams in mind, the lightweight suitcase is ideal for discreet travel.

Set up the PDR8000 suitcase at a special event or incident to swiftly provide local P25 or analog FM on-scene portable radio coverage. Connect to your Motorola Solutions dispatch console wherever it may be via a V.24 telephone connection.

KEY FEATURES AND BENEFITS

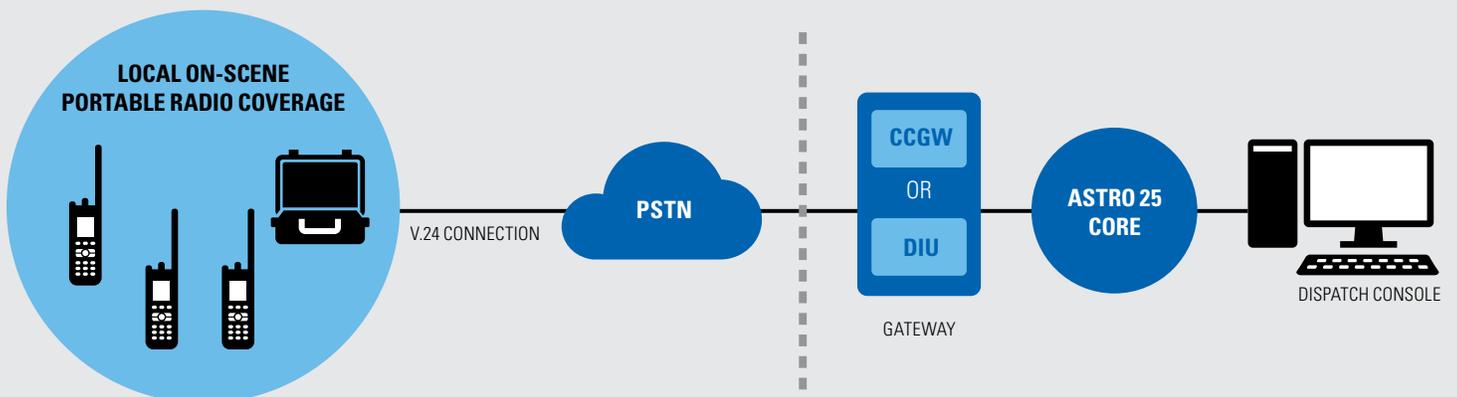
- All Bands – VHF, UHF, 700 MHz and 800 MHz
- Lightweight construction - less than 28 lbs.
- Rapid deployment with AC or DC power source capability
- Closed case operation
- Patented method to easily connect/swap duplexer and Booster Pack
- Able to use external duplexer
- Local user interface

- Deployment profile capability
- End-to-end Encryption supported
- Voting and comparator operation
- Cross patch capability
- Optional booster pack provides 50 watts output
- Platform support for future interfaces including Bluetooth, Wi-Fi and Ethernet

APPLICATIONS

- Special events
- Interoperability
- Dignitary protection
- In-building coverage
- Natural disaster

PDR8000 DIAGRAM



PDR8000 SPECIFICATIONS

GENERAL SPECIFICATIONS

Dimensions: Width / Height / Depth (without Antenna)	488 mm (19.2") x 386 mm (15.2") x 185 mm (7.3")
Weight (without duplexer)	27.8 lbs (12.6 kg)
IEC IP Rating During Operation and Storage (Closed Case)	IP65
AC Supply Voltage	100 VAC to 240 VAC, 47 Hz to 63 Hz
AC Current at 120V AC	2.9A
AC Supply Approvals	UL60950-1 and IEC60950-1
DC Supply Voltage	13.8V DC -15% / +20%
DC Current Drain	
Standby/Receive	0.9A
Transmit	7.0A
Operating Temperature, Full Power Output 50% duty cycle (case closed) 100% duty cycle (case open)	-30 to +55 °C (-22 to 131 °F) -30 to +50 °C (-22 to 131 °F)
Antenna Impedance	50 Ohms

External Connectors

PDR Antenna	N female, with Dustcap
RF Input	N female, with Dustcap
RF Output	N female, with Dustcap
AC Input	powerCON TRUE1, NAC3MPX, with Sealing Cover
DC Input	LEMO push pull, EGL.2K.302.CLA, with Dustcap
AUX	LEMO push pull, EGG.1K.308.CLL, with Dustcap
V.24	RJ-45 Type, 17-111574, with Dustcap
LAN	RJ-45 Type, 17-111574, with Dustcap
Ground	Stainless steel stud, 0.5" long with 10-32 thread

Internal Connectors

Computer Interface	USB (type B)
Channel Spacing	Digital: 12.5 kHz programmable Analog: 12.5 or 25 kHz programmable
Number of Channels	64

EQUIPMENT TYPE ACCEPTANCE

	VHF	UHF	700 MHz	800 MHz
FCC	LO6-DVRSVHF	LO6-DVRSUHF	LO6-DVRS700	LO6-DVRS800
Industry Canada	2098B-DVRSVHF	2098B-DVRSUHF	2098B-DVRS700	2098B-DVRS800

TRANSMITTER SPECIFICATION

	VHF	UHF	700 MHz	800 MHz
Frequency Band [MHz]	136-174 MHz	380-430 MHz 450-470 MHz	764-776 MHz	851-869 MHz
RF Output Power (without Duplexer) – Programmable per channel	20W	19W	16W	17W
TOT Option	10 seconds to 2550 seconds or Disabled			
Max Spurious Output	-20dBm			
FM Hum and Noise 12.5kHz	37dB			

RECEIVER SPECIFICATION

	VHF	UHF	700 MHz	800 MHz
Frequency Band [MHz]	136-174 MHz	380-430 MHz 450-470 MHz	794-806 MHz 764-776 MHz	806-824 MHz 851-869 MHz
Receiver Sensitivity – Digital P25 5% BER (without Duplexer)	-115dBm			
Selectivity 12.5kHz	60dB			
Intermodulation	70dB			
FM Hum and Noise 12.5kHz	37dB			

MILITARY STANDINGS COMPLIANCE

MIL-STD-810G

High Temperature	501.6
Low Temperature	502.6
Temperature Shock	503.6
Rain	506.6
Humidity	507.6
Salt Fog	509.5
Vibration	514.7
Shock	516.7
Safety	EN 62368-1

Specifications are typical and subject to change without notice. Futurecom Systems Group, ULC does not accept liability for any error or omission in this document.

OPTIONAL EXTERNAL BOOSTER PACK

The PDR8000 combined with the Booster Pack can provide wider coverage for your mobile users. The Booster Pack is housed in a separate suitcase the same size as the PDR8000. During operation, the PDR8000 automatically detects the presence of the Booster Pack and adjusts its operating parameters to be compatible with the Booster Pack, providing a pre-duplexer output signal of 50 watts.

GENERAL SPECIFICATIONS

Dimensions: Width / Height / Depth	488 mm (19.2") x 386 mm (15.2") x 185 mm (7.3")
Weight	23.2 lbs (10.5 kg)
AC Supply Voltage	100 VAC to 240 VAC, 47 Hz to 63 Hz
AC Current at 120V AC	4.0A
DC Supply Voltage	13.8V DC -15% / +20%
DC Current Drain	
Standby/Receive	0.7A
Transmit	14.3A
Operating Temperature, Full Power Output 50% duty cycle (case closed)	-30 to +55 °C (-22 to 131 °F)
100% duty cycle (case open)	-30 to +60 °C (-22 to 140 °F)
External Connectors	
RF Input	N female, with Dustcap N female, with Dustcap powerCON TRUE1, NAC3MPX, with Sealing Cover LEMO push pull, EGL.2K.302.CLA, with Dustcap LEMO push pull, EGG.1K.308.CLL, with Dustcap Stainless steel stud, 0.5" long width 10-32 thread
RF Output	
AC Input	
DC Input	
AUX	
Ground	



EQUIPMENT TYPE ACCEPTANCE

	VHF	UHF	700 / 800 MHz
FCC	CWWDSDTV100XX	CWWSDTUL50	CWWSDTJK50
Industry Canada	7291A-DSDTV100XX		

TRANSMITTER SPECIFICATION

	VHF	UHF	700 / 800 MHz
Frequency Band (MHz)	136-174 MHz	380-430 MHz 450-470 MHz	764-776 MHz 851-869 MHz
Typical Power Output	50W		

Learn more at www.motorolasolutions.com/pdr8000.



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