

# Mag One BPR 50dX

Customer Presentation



July 2024



**MOTOROLA SOLUTIONS**

# Mag One BPR 50dX

Built for the fast-paced world of business



## Retail

Today's shopper expects quick resolution; provide a seamless experience with uninterrupted talk time and clear audio.



## Event management

Stay coordinated and communicate across your entire property, with up to 5 W transmission power.



## Education

Monitor student activity, even in loud spaces; at 3W max audio output, the BPR 50dX is the loudest in the Mag One family.



# Ready to work

Keep your workforce connected

1. Stay safe  
Emergency features like a dedicated emergency button, alarm triggering and lone worker help protect your staff.
2. Take control  
3 programmable buttons make for a personalized user experience
3. Listen up  
3W max output and noise cancellation ensures clear audio, even in noisy environments.
4. Take charge  
With USB-C charging options, you can charge anywhere, anytime. And with 23 hours of talk time, your workforce stays focused on the task at hand.



# Stay safe

A full suite of emergency features



Emergency calling and alerts

Place calls and send alerts via dedicated emergency button.



Lone worker

Sets a timer that places an emergency call when no activity is detected.



Remote monitor

Open a channel and listen even if the user can't key up.



# Take control

Highly customizable



Three programmable buttons  
Set your most commonly-used features, including Emergency.



Customer programming software  
Program and customize from your laptop.



Radio enable / disable  
Remotely enable / disable your radio to prevent unauthorized transmissions



# Listen up

High-quality audio



Up to 3 W audio output  
Hear others over loud noises.



Noise cancellation  
Be heard clearly, even if you're in a noisy environment.



High RF power  
Up to 5 W helps you stay connected over your entire property.



Custom channel announcements  
Easier operation with minimal training.



# Take charge

Hours of talk time and flexible charging



Extended talk time

Up to 23 hours in digital mode



USB-C charging

Charge anytime, anywhere, using a commodity cable.



Desktop charger

Compact and convenient



# Specifications

	Mag One BPR 50dX		Mag One BPR 40d
Band	UHF	VHF	UHF
Frequency	400 - 470 MHz	136 - 174 MHz	400-470 MHz
RF output			
High power	4 W	5 W	4 W
Medium power	2.5 W		
Low power	1 W		1 W
Channel capacity	64 channels		16 channels
H x W x D at grip, with battery	4.8 x 2.1 x 1.2 inches (122 x 54 x 30 mm)		4.2 x 2.3 x 1.5 inches (107 x 58 x 37 mm)
Weight	10.6 oz. (300 g)		10.9 oz. (310 g)
Battery life	Digital: up to 23 hrs. Analog: up to 16 hrs.		Digital: up to 15 hrs. Analog: up to 12 hrs.
Audio output	1 W rated / 3 W max		500 mW rated
Operating temperature*	-22°F to +140°F (-30°C to +60°C)		-22°F to +140°F (-30°C to +60°C)
Storage temperature	-40°F to +185°F (-40°C to +85°C)		-40°F to +185°F (-40°C to +85°C)

\*Temperatures listed are for radio specification only. Battery discharge: -4°F to 140°F (-20°C to +85°C)



# In-box items

What comes with my BPR 50dX?



**PS000150A31**

Power supply



**PMNN4847A**

Li-Ion battery  
2200 mAh



**PMLN8599A**

Single-unit  
charger



**PMKN4274A**

USB-A to USB-C cable  
(charging only)



**PMLN6536A**

Belt clip

**\*PMAE4118A**

UHF Stubby Mag One  
Antenna



# BPR50dX antennas



**PMAE4118A**  
UHF Stubby Antenna  
(450-470MHz)  
AN000462A01



**PMAE4117A**  
UHF Whip Antenna  
(400-470 MHz)  
AN000468A01



**PMAD4164A**  
VHF Whip Antenna (136-  
155 MHz)  
AN000464A01



**PMAD4165A**  
VHF Whip Antenna (152-  
174 MHz)  
AN000465A01



# BPR 50dX accessories

Available separately



## PMLN6531

Mag One Ear Receiver With  
In-Line Microphone and  
PTT, VOX



## PMLN6532

Mag One Swivel Earpiece  
With In-Line Mic / PTT



## PMLN6534

Mag One Earbud With In-  
Line Microphone and PTT,  
VOX



## PMLN6536

2 Wire Surveillance Kit With  
Quick Disconnect Acoustic  
Tube



## PMLN6542

Mag One Breeze HS with  
BOOM Mic & PTT



## PMMN4092

Mag One Breeze Remote  
Speaker Microphone



# Resources available at launch

- Data sheet
- Product photography
- Customer presentation
- [motorolasolutions.com](https://motorolasolutions.com) product page

Data Sheet

## Mag One BPR 50dX

### portable two-way radio

Built for the fast-paced world of business

The Mag One BPR 50dX is a versatile and high-performing device for your business workforce. Whether managing a retail store, coordinating events or overseeing campus activity, the BPR 50dX connects your team with static-free, reliable communication – in a world where every second counts.



	136 - 174 MHz	
4 W	2.5 W	5 W
	1 W	
	64 channels	
	12.5 / 25.0 kHz	
	122 x 54 x 30 mm	
	300 g	
	16 hours / 23 hours	
	7.2 V	

  

12.5 MHz Data: 7K6GF 1D and 7K6DF XD
12.5 MHz Voice: 7K6GF 1E and 7K6DF XE
Combination: 7K6GF 1W
ETSI TR 102 201-1, -2, -3
+ 36 dBm for +1 GHz / + 36 dBm for +1 GHz
+ 60 dB @ 12.5 kHz / +70 dB @ 25 kHz
± 1.5 ppm
± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz

  

RECEIVER SPECIFICATIONS	
Analog sensitivity (12dB SINAD)	0.18 µV (typical)
Digital sensitivity (5% BER)	0.18 µV (typical)
Conducted / radiated spurious emissions (TIAG60E)	+ 67 dBm for +1 GHz; + 47 dBm for +1 GHz
Intermodulation (TIAG60E)	+ 65 dB
Adjacent channel selectivity (TIAG63A) 1T	+ 60 dB @ 12.5 kHz / +70 dB @ 25 kHz
Spurious Rejection (TIAG60E)	> 70 dB
Frequency stability	± 1.5 ppm

  

AUDIO SPECIFICATIONS	ENVIRONMENTAL SPECIFICATIONS
Digital vocoder type	AMBE+2
Operating temperature <sup>1</sup>	-30 °C to 60 °C
Audio output power (Rated / Max)	1 W / 3 W
Storage temperature	-40 °C to 85 °C
Audio distortion at rated power	3% (typical)
Temperature shock	Per MIL-STD 883C, D, E, F, G, H
Hum and noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz
Humidity	Per MIL-STD 883C, D, E, F, G, H
Electrostatic discharge	IEC 61000-4-2 Level 4
Dust and water situation	IP68/IP69K
Salt fog	Per MIL-STD 883C, D, E, F, G, H

  

① Dimensions at grip area.

<sup>1</sup> Typical battery life, 5/1/90 profile at maximum transmitter power. Actual observed runtimes may vary.

<sup>2</sup> Temperature listed are for radio specification. Li-ion battery discharge: -20°C to +60°C.







Solving for safer  
communities  
schools  
hospitals  
businesses  
everywhere.

