

Mag One X8d portable radio

Designed for dynamic
business operations



The Mag One X8d serves as a robust and high-performing communication tool for your professional teams. Whether managing retail settings, organizing large-scale events, or overseeing campus activities, the X8d ensures your personnel maintain clear, dependable connectivity, critical when every moment counts.

→ Take control

Providing 23 hours of talk time, the X8d is engineered to last beyond a typical work shift. Additionally, its USB-C port allows for convenient charging using a standard USB charger.

→ Listen up

With its 3-watt maximum audio power output, the X8d delivers exceptionally loud and clear audio, ensuring messages cut through noisy environments.





Built to conquer the workday

Designed for a connected workforce, the X8d offers enhanced range performance for clear communication across broad areas. With an IP55 rating, it's built to withstand the demands of an active workday, and supports 64 channels for flexible communication.

Product Features

GENERAL

Analog and digital

DMR standards compliant¹

64 channels

USB-C (charging and programming)

2 programmable buttons

Voice announcements

Custom channel announcements

Dual priority scan

Nuisance Channel Delete

Voice Operated Transmission (VOX)

IP55 dust and water ingress protection

AUDIO

Enhanced audio power

Transmit Noise suppression

SAFETY

Remote monitor

Radio disable / enable

SYSTEM

Dual-capacity direct mode¹

ANALOG FEATURES

Analog scrambling

¹ Digital feature



Specifications

GENERAL SPECIFICATIONS	
FREQUENCY	400 - 470 MHz
Typical RF output	
High power	4 W
Low Power	1 W
Channel capacity	64 channels
Channel spacing	12.5 / 25.0 kHz
Dimension ¹ (H x W x D) with battery	120 x 55 x 33.5 mm
Weight with battery, antenna, belt clip	300 g
Power supply (Nominal)	7.2 V
Battery life ² (analog / digital)	16 hours / 23 hours
Digital technology	Time Division Multiple Access (TDMA)
TRANSMITTER SPECIFICATIONS	
4FSK digital modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination: 7K60F1W
Digital protocol	ETSI TS 102 361-1, -2, -3
Conducted / radiated spurious emissions (TIA603E)	< -36 dBm for < 1 GHz ; < -30 dBm for > 1 GHz
Adjacent channel power	> 60 dB @ 12.5 kHz / >70 dB @ 25 kHz
Frequency stability	± 1.5 ppm
Modulation limiting	± 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 (TIA603E)	< -57 dBm for < 1 GHz ; < -47 dBm for > 1 GHz
Intermodulation (TIA603E)	> 65 dB
Adjacent channel selectivity (TIA603A)-1T	> 60 dB @ 12.5 kHz / > 70 dB @ 25 kHz
Spurious Rejection (TIA603D)	> 70 dB
Frequency stability	± 1.5 ppm
AUDIO SPECIFICATIONS	
Audio output power (Rated / Max)	1 W / 3 W
Audio distortion at rated power	3% (typical)
Hum and noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz
ENVIRONMENTAL SPECIFICATIONS	
Operating temperature ³	-30 °C to 60 °C
Storage temperature	-40 °C to 85 °C
Electrostatic discharge	IEC 61000-4-2 Level 4
Dust and water intrusion	IEC60529 IP55

¹ Dimensions at grip area.

² Typical battery life, 5/5/90 profile at maximum transmitter power. Actual observed runtimes may vary.

³ Temperature listed are for radio specification. Li-Ion battery discharge: -20°C to +60°C.





To learn more, visit:
motorolasolutions.com/x8d



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