



EX™ Series

EX560•XLS™

Professional Submersible Two-Way Portable Radio

**Signaling**

The radio software encompasses Private Line™ and five-tone selective signaling.

X-Pand™ voice compression and low level expansion

Crisp, clear and strong audio quality in virtually any noisy environment. Low level expansion allows further improvements in audio quality by reducing noise usually heard during pauses in conversation.

Voice Operated Transmit (VOX)

Hands-free operation when used with VOX headset accessory.

Adjustable power levels

The radio output power has two settings – low power extends battery life and high power allows the radio to transmit over a greater distance.

Tight / normal squelch

Enhances audio clarity by filtering out unwanted interference. A tight squelch gives clearer playback of messages, while a normal squelch increases coverage.

Enhanced Li-Ion battery performance

Each EX560•XLS radio is fitted as standard with a high-capacity Lithium Ion battery. Providing for longer battery life and having no memory or 'over-charge' side effects, Li-Ion batteries offer increased operating times and extended service life when compared to NiCd or NiMH batteries.

Emergency signaling

Sends a help signal to a pre-defined person or group of people.

Programmable channel spacing (12.5/20/25 KHz)

Flexible and easy migration of channel spacing requirements in any situation.

Trunking capability

Designed to operate on LTR® trunking systems, the EX560•XLS can enhance your communication by providing a wider calling range, faster channel access, greater privacy, and higher user and talkgroup capacity.

Talkaround

Freedom to communicate utilizing a system or dispatcher for wide-area coverage, or bypass and talk directly to another unit for easy local unit-to-unit communications.

Whisper

Allows a user to speak quietly into a radio and still be heard clearly.

Call forward

Allows calls to be forwarded to another radio user if you are unable to answer your calls personally.

Full portfolio of accessories

Extend the functionality of your radio even further with a complete portfolio of Motorola Original accessories. You'll find windporting remote speaker microphones with IP57 rating. A selection of FM approved* and IP67 batteries is also available.

*Approved for use with FM approved radio units.

Designed to operate in the harshest of outdoor environments, Motorola's EX560•XLS two-way radio provides exceptional quality, performance, durability and reliability to your organization's two-way communication solution.

Designed for durability

The EX560•XLS two-way radio complies with the following standards:

- MIL-STD-810-C, D, E & F
- IP67 – sealing against dust and water intrusion – submersible in up to one meter of fresh water for up to 30 minutes
- FM approved as intrinsically safe
- Motorola Accelerated Life Testing (ALT) simulation of five years use

Water and dust tight solution

The EX560•XLS two-way radio is rated IP67 for resilience to the ingress of dust and water. Ideal for even the harshest outdoor working environments, the EX560•XLS two-way radio helps to ensure constant communication.

Compact and lightweight

With its compact and lightweight design, the EX560•XLS will not hamper users during work routines. It has six simple, programmable buttons to ensure fast communication and an ergonomically designed Push-to-Talk button that provides easy operation, even with gloved hands.

Crisp, clear audio

Crisp, clear and strong audio quality in virtually any noisy environment. X-Pand™ Voice Compression and low level expansion allows further improvements in audio quality by reducing noise usually heard during pauses in conversation. And the emergency signaling feature can be configured to send a help signal to a pre-defined person or group of people at a single push of a button.

General Specifications

	VHF	UHF 1	UHF 2
Frequency:	136-174 MHz	403-470 MHz	450-527 MHz
Channel capacity:	EX500: 16 Channels; EX600: 128 Channels; EX560•XLS, EX600•XLS: 160 Channels		
Power supply:	7.5 Volts +/- 20%		
Dimensions:	Plain Radio	Keypad Radio	
With standard high capacity lithium battery:	101.5mm x 55.5mm x 30.5mm	101.5mm x 55.5mm x 33mm	
With ultra high capacity lithium battery:	101.5mm x 55.5mm x 35.5mm	101.5mm x 55.5mm x 38mm	
EX560•XLS with IP67 Li-Ion battery:	-	101.5mm x 56.5mm x 39mm	
Weight:			
With standard high capacity lithium battery:	250 g	265 g	
With ultra high capacity lithium battery:	270 g	285 g	
EX560•XLS with IP67 Li-Ion battery:	-	320 g	
Average battery life @ (5-5-90 duty cycle):	Low Power	High Power	
Standard high capacity lithium battery:	>10 hrs	>7 hrs	
Ultra high capacity lithium battery:	>14 hrs	>10 hrs	
IP67 Li-Ion battery:	>13 hrs	>10 hrs	
Sealing:	Meets MIL-STD-810-C, D, E & F and IPX7 / IPX4 MIL-STD-810C method 506.1 pro. I & II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810D method 506.2 pro. I & II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810E method 506.3 pro. I & II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810F method 506.4 pro. I & III→EX560•XLS IEC 60529 IPX7→EX560•XLS; IEC 60529 IPX4→EX500, EX600, EX600•XLS		
Shock:	Meets MIL-STD-810-C, D, E & F MIL-STD-810C method 516.2 pro. II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810D method 516.3 pro. IV→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810E method 516.4 pro. IV→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810F method 516.5 pro. IV→EX560•XLS		
Vibration:	Meets MIL-STD-810-C, D, E & F MIL-STD-810C method 514.2 pro. VIII cat. F→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810D method 514.3 pro. I cat. 10→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810E method 514.4 pro. I cat. 10→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810F method 514.5 pro. I cat. 24→EX560•XLS		
Dust:	Meets MIL-STD-810-C, D, E & F and IP6X / IP5X MIL-STD-810C method 510.1 pro. I→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810D method 510.2 pro. I→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810E method 510.3 pro. I→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810F method 510.4 pro. I→EX560•XLS IEC 60529 IP6X→EX560•XLS; IEC 60529 IP5X→EX500, EX600, EX600•XLS		
Humidity:	Meets MIL-STD-810-C, D, E & F MIL-STD-810C method 507.1 pro. II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810D method 507.2 pro. II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810E method 507.3 pro. II→EX500, EX600, EX600•XLS, EX560•XLS MIL-STD-810F method 507.4→EX560•XLS		
FCC Description:	AZ489FT3801	AZ489FT4844	AZ489FT4845

Transmitter	VHF	UHF 1	UHF 2	Receiver	VHF	UHF 1	UHF 2
	RF output Li-Ion @ 7.5V:	Low 1W High 5W	Low 1W High 4W				12.5 kHz
Frequency:	136-174 MHz	403-470 MHz	450-512 MHz	Frequency:	136-174 MHz	403-470 MHz	450-512 MHz
Channel spacing:	12.5 / 20 / 25 kHz			Sensitivity 12dB EIA SINAD:	0.35 uV		
Frequency stability: (-30°C to +60°C)	0.00025%			Adjacent channel selectivity ETS	-60 dB	-70 dB	-60 dB
Spurs/harmonics:	-36 dBm < 1GHz -30 dBm > 1GHz			Intermodulation ETS	-65 dB		
Audio response: (from 6 dB/oct. Pre-emphasis, 300 to 3000Hz)	+1, -3 dB			Frequency stability: (-30°C to +60°C)	0.00025%		
Audio distortion: @ 1000 Hz, 60% rated max. dev.	<5%			Spur rejection:	-70 dB		
FM noise:	-40 dB			Image rejection:	-70 dB		
				Audio output: @ <5% distortion	500 mW		

All specifications are subject to change without notice.

EX500, EX560•XLS and EX600•XLS radio models are FM approved as intrinsically safe for use in Division 1, Class I, II, III, Group C,D,E,F and G. Division 2, Class I, Groups A, B, C, D when ordered with the FM option and battery.



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