

Data Sheet

LACR

MOTOTRBO™ SL500e

Portable two-way radios

Slim and lightweight, MOTOTRBO SL500e portable two-way radios provide push-to-talk communication in a stylish and discreet design. They blend seamlessly with professional attire, allowing you to move freely. At the same time, they're durable and built to last.

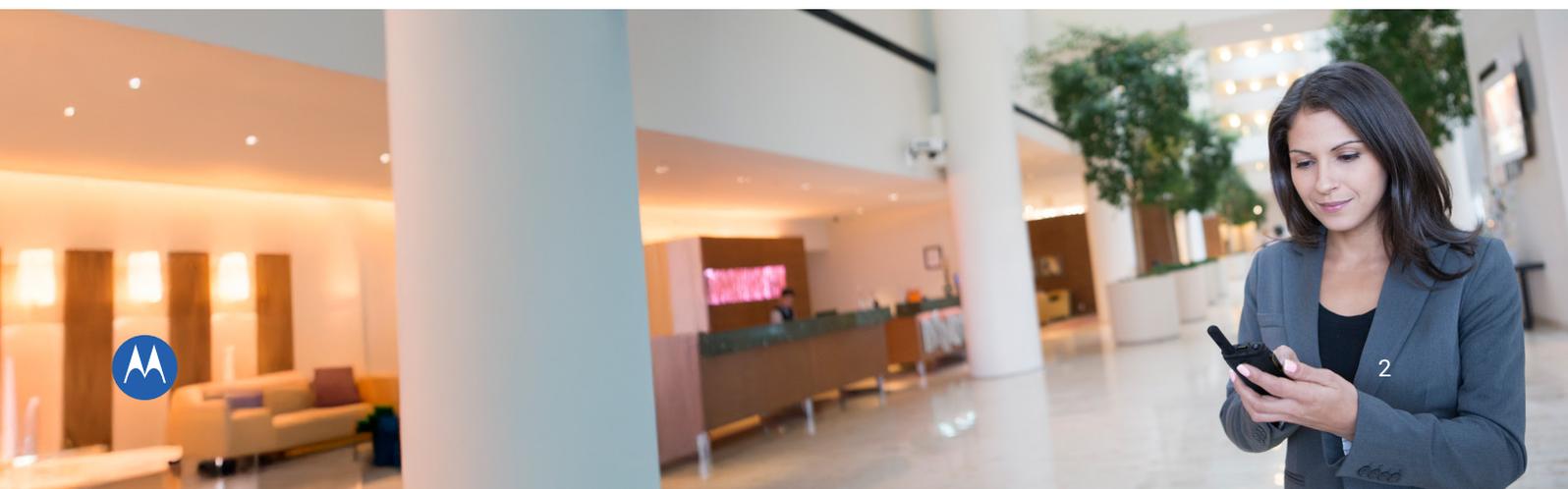


Key features

- VHF and UHF
- Analogue and digital
- Slim and light form factor
- Voice and data
- Virtual keypad and display
- Covert mode
- Mute mode
- Quick text messaging
- Integrated Wi-Fi
- Bluetooth® audio and data
- Voice announcement
- Home channel reminder
- Intelligent Audio
- Background noise cancellation
- Acoustic feedback suppressor
- Microphone distortion control
- User-selectable audio profiles
- Trill enhancement
- Three programmable buttons
- Over-the-air software update
- Lone worker
- Basic privacy
- Enhanced privacy
- Transmit interrupt
- Unified call list
- Notification list
- Radio service menu
- Ignore clear signal
- Digital emergency
- Emergency search tone
- Remote monitor
- Radio disable / enable
- Splashproof to IP54
- Rugged to MIL-STD 810
- Wide range of accessories

GENERAL SPECIFICATIONS

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	SL500e	
Band	VHF	UHF
Frequency	136-174 MHz	403-480 MHz
High power output ¹ (digital)	3 W	
High power output (analogue)	2 W	
Low power output	0.5 W, 1 W	
Channel spacing	12.5, 25 kHz	
Channel capacity	128	
Zone capacity	50	
Display	Virtual display and keypad activates when touched. Two line OLED display and 4-button virtual keypad	
Power supply (nominal)	3.7 V	
MOTOTRBO SL500e WITH SLIM LI-ION 2300 MAH BATTERY (PMNN4468)		
Dimensions (H x W x D)	126 x 55 x 23 mm (4.95 x 2.16 x 0.89 in)	
Weight	190 g (6.7 oz)	
Battery life ² digital / analogue	13.5 / 11 hours	



Specifications

TRANSMITTER SPECIFICATIONS

4FSK digital modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1W
Digital protocol	ETSI TS 102 361-1, -2, -3, DMR Tier II
Conducted/radiated emissions (TIA603D)	-36 dBm, <1 GHz, -30 dBm >1 GHz
Adjacent channel power	60 dB (12.5 kHz channel) 70 dB (25 kHz channel)
Frequency stability	±1.5 ppm

AUDIO SPECIFICATIONS

Digital vocoder type	AMBE+2™
Audio response	TIA603D
Rated audio	0.5 W
Audio distortion at rated audio	5% (3% typical)
Hum and noise	-40 dB (12.5 kHz channel) -45 dB (25 kHz channel)
Conducted spurious emissions (TIA603D)	-57 dBm

BLUETOOTH SPECIFICATIONS

Version	4.0
Range	Class 2, 10 m (33 ft)
Supported profiles	Bluetooth Headset Profile (HSP), Serial Port Profile (SPP), Motorola Solutions fast push-to-talk
Simultaneous connections	1 x audio accessory and 1 x data device
Permanent discoverable mode	Optional

RECEIVER SPECIFICATIONS

Analogue sensitivity (12dB SINAD)	0.3 µV, 0.22 µV (typical)
Digital sensitivity (5% BER)	0.25 µV, 0.19 µV (typical)
Intermodulation (TIA603D)	70 dB
Adjacent channel Selectivity, (TIA603A)-1T	60 dB (12.5 kHz channel) 70 dB (25 kHz channel)
Adjacent channel Selectivity, (TIA603D)-2T	45 dB (12.5 kHz channel) 70 dB (25 kHz channel)
Spurious rejection (TIA603D)	70 dB

ENVIRONMENTAL SPECIFICATIONS

Operating temperature ³	-30 °C to 60 °C (-22 °F to 140 °F)
Storage temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Electrostatic discharge	IEC 61000-4-2 level 3
Dust and water intrusion	IEC 60529 - IP54
Packaging test	MIL-STD 810D, E

WI-FI SPECIFICATIONS

Standards supported	IEEE 802.11b, 802.11g, 802.11n
Security protocol supported	WPA, WPA2, WEP
Maximum number of SSIDs	128

MILITARY STANDARDS

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	Method	Procedure/ category								
Low pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature shock	503.1	I	503.2	I/A1/C3	503.3	I/A1/C3	503.4	I	503.5	I-C
Solar radiation	505.1	II	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II/Hot-Humid	507.3	II/Hot-Humid	507.4	-	507.5	II/Aggravated
Salt fog	509.1	I	509.2	I	509.3	I	509.4	-	509.5	-
Blowing dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Blowing sand	-	-	510.2	II	510.3	II	510.4	II	510.5	II
Vibration	514.2	VIII/CatF, XI	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24, II/5	514.6	I/24, II/5
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, V, VI



Features

	SL500e
GENERAL	
Virtual display and keypad	●
Analogue and digital	●
Voice and data	●
Quick text messaging	●
Integrated Wi-Fi	●
Bluetooth audio	●
Bluetooth data	●
Indoor location tracking	○
Voice announcement	●
Home channel reminder	●
Late entry	●
Priority scan	●
Covert mode	●
IP54	●
Rugged to MIL-STD 810	●
AUDIO	
Intelligent Audio	●
SINC+ background noise cancellation	○
Acoustic feedback suppressor (digital)	●
User-selectable audio profile	●
Trill enhancement	●
Microphone distortion control	●
Received audio levelling	●
Mute mode	●
Voice operated transmit (VOX)	●

	SL500e
MANAGEMENT	
CPS 2.0 and Radio Management	●
Over-the-air programming (via DMR)	●
Over-the-air software update (via Wi-Fi)	○
Rental timer	●
SAFETY	
Emergency alert	●
Lone worker	●
Transmit Interrupt	●
Basic privacy	●
Enhanced privacy	○
Remote monitor	●
Digital emergency	●
Emergency search tone	●
Radio disable / enable	●
CUSTOMISATION	
Programmable buttons	3
SYSTEMS	
Dual Capacity Direct Mode	●
Conventional	●
IP Site Connect	○
Capacity Plus single site	○
Capacity Plus multi-site	○

● Included ○ Optional — Not Included

¹ Maximum 2 W for frequencies above 470 MHz.

² Typical battery life, 5/5/90 profile at maximum transmitter power with Bluetooth and Wi-Fi disabled. Actual observed runtimes may vary.

³ Radio only. Operating temperature with battery -10° C to +60 C.

To learn more about MOTOTRBO, visit:
motorolasolutions.com/mototrbo

These models are available in Motorola Solutions LACR region only. Availability varies and is subject to individual country law and regulations. All specifications shown are typical unless otherwise stated and are subject to change without notice.

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