

# MOTOTRBO™ SL1600 PORTABLE RADIO

## PORTABILITY AND SIMPLICITY REDEFINED



The MOTOTRBO™ SL1600 provides reliable push-to-talk communication for the mobile, everyday user in an ultra-slim and rugged profile. Whether you're coordinating stewards at an event or managing workers in the field, the SL1600 is boldly designed to keep you efficiently connected.

The latest technology works to make operation of the SL1600 simple and straightforward. Ergonomic design allows one-handed radio operation, and a versatile accessory portfolio gives you the freedom to focus on the job at hand.

The SL1600 is compatible with the MOTOTRBO features you'll find are business-essential, for example a transmission can be interrupted to prioritize critical communications. Additionally, the SL1600 supports both digital and analogue radio technology to fit seamlessly into your existing communication system.

### ULTRA-SLIM PROFILE

At only 22mm thick, the SL1600 is ultra-portable. A stubby antenna, curved edges and rugged frame make the SL1600 the perfect work partner. It can be easily carried in pockets or bags without snagging or bulging.

### SIMPLE OPERATION

The SL1600 has been designed for easy, intuitive use. The side volume control, dedicated power button, prominent push-to-talk button, and top toggle channel switch have all been designed for quick one-hand access. Channel "fast toggle" allows users to scroll through 10 channels at a time.

### ADVANCED TECHNOLOGY

The SL1600 is outfitted with the latest technology for performance and ease of use. The shatterproof Active View display uses a matrix of LEDs behind the radio housing to communicate status information and shuts off when not in use to conserve battery life. The SL1600 also features Range Max technology: an advanced radio design and patented antenna which delivers enhanced range while maintaining a slim profile and long battery life.

### RUGGED AND RELIABLE

The SL1600 is built to last. IP54 rated for dust and water resistance, it can be used even in harsh environments. This radio can survive many drops and tumbles. It has also been proven tough in Motorola's grueling Accelerated Life Test, where the radio is tested against a simulated 5 years of hard service before it is accepted.

## MOTOTRBO SL1600 SERIES ACCESSORIES



### CARRY ACCESSORIES

Our versatile portfolio includes a flexible hand strap, rotating heavy duty belt clip, and swivel carry holster. A nylon wrist strap can also be attached at the top of the radio.

PART #	DESCRIPTION
PMLN6074	Nylon Wrist Strap
PMLN7076	Flexible Quick Release Hand Strap
PMLN7128	Heavy-Duty Swivel Belt Clip
PMLN7190	Carry Holder/Holster with Swivel Belt Clip



### ANTENNAS

Outfit your SL1600 with high efficiency stubby antennas. Coloured antenna ID bands are available for easy customisation and identification.

PART #	DESCRIPTION
PMAE4093	UHF Stubby Antenna for the 403-425MHz range (4.5cm)
PMAE4094	UHF Stubby Antenna for the 420-445MHz range (4.5cm)
PMAE4095	UHF Stubby Antenna for the 435-470MHz range (4.5cm)
PMAD4144	VHF Stubby Antenna for the 136-144MHz range (5cm)
PMAD4145	VHF Stubby Antenna for the 144-156MHz range (5cm)
PMAD4146	VHF Stubby Antenna for the 156-174MHz range (5cm)
32012144001	Antenna ID Band (Gray, Pack of 10)
32012144002	Antenna ID Band (Yellow, Pack of 10)
32012144003	Antenna ID Band (Green, Pack of 10)
32012144004	Antenna ID Band (Blue, Pack of 10)
32012144005	Antenna ID Band (Purple, Pack of 10)



### AUDIO ACCESSORIES

MOTOTRBO audio accessories for SL1600 are designed for lasting comfort and improved device performance. In-line microphones and prominent push-to-talk features provide easy hands-free communication.

PART #	DESCRIPTION
PMLN7156	Mag One Earbud with in-line microphone and push-to-talk
PMLN7159	Adjustable D-style earpiece with in-line microphone and push-to-talk, black
PMLN7189	Swivel Earpiece with in-line microphone and push-to-talk
PMLN7158	1-Wire Surveillance Kit with in-line microphone and push-to-talk, black
PMLN7157	2-Wire Surveillance Kit with translucent tube, black



### BATTERIES, CHARGERS AND CABLES

Keep your radios functioning at all times with these essentials. Charge your Lithium Ion batteries in MOTOTRBO single or multi-unit charging docks.

PART #	DESCRIPTION
PMNN4468	Li-Ion 2300 mAh battery
PMLN7074	Replacement Battery Cover
PS000042A12	Micro-USB Single-Unit Rapid Rate Charger (EU plug)
PS000042A13	Micro-USB Single-Unit Rapid Rate Charger (UK plug)
PMLN7110	Single-Unit Rapid Rate Charger (EU Plug)
PMLN7163	Single-Unit Rapid Rate Charger (UK Plug)
PMLN7102	Six-Pocket Multi-Unit Rapid Rate Charger (EU plug)
PMLN7162	Six-Pocket Multi-Unit Rapid Rate Charger (UK plug)
CB000262A01	Micro USB Programming Cable

**DATA SHEET**  
SL1600 PORTABLE RADIO

## GENERAL SPECIFICATIONS

	VHF	UHF
	<b>DISPLAY</b>	
Channel Capacity	99	
Typical RF Output Low Power Output High Power Output	1W 2W 3W	-with Range Max technology
Analogue Digital		
Frequency	136-174 MHz	403-470 MHz
Dimensions (H x W x L)	126 X 55 X 22 mm (4.95 X 2.17 x 0.87 in)	
Weight with Battery	169g (5.96 oz)	166g (5.84 oz)
Power Supply	3.7V (Nominal)	
Battery Life <sup>1</sup> [Li-Ion (2300mAh) Battery]		
Analogue (hours)	11.8	
Digital (hours)	14	
FCC Description	AZ489FT3835	AZ489FT4922
IC Description	109U-89FT3835	109U-89FT4922

## RECEIVER

	VHF	UHF
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 1.5 ppm	
Analogue Sensitivity (12 dB SINAD)	0.3 uV 0.22 uV (typical)	
Digital Sensitivity (5% BER)	0.25 uV 0.19 uV (typical)	
Intermodulation	65dB	
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	
Spurious Rejection	70 dB	
Rated Audio	0.5 W (Internal)	
Audio Distortion @ Rated Audio	5% (3% typical)	
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz	
Audio Response	TIA603D	
Conducted Spurious Emissions (TIA603D)	-57 dBm	

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature <sup>2</sup>	-30°C / +60°C
Storage Temperature	-40°C / +85°C
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
ESD	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IEC60529 - IP54
Packaging Test	MIL-STD 810D and E

<sup>1</sup> Average battery life at 5/5/90 duty cycle, transmitter in high power. Actual battery runtime observed may vary.

<sup>2</sup> Radio only. Operating temperature specification for a Li-Ion battery is -10 °C to +60 °C.



## TRANSMITTER

	VHF	UHF
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 1.5 ppm	
Low Power Output High Power Output	1W 2W 3W	
Modulation Limiting	± 2.5 kHz @ 12.5 kHz ± 4.0 kHz @ 20 kHz ± 5.0 kHz @ 25 kHz	
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz	
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz	
Adjacent Channel Power	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	
Audio Response	TIA603D	
Audio Distortion	3% (typical)	
4FSK Digital Modulation	12.5kHz Data: 7K60F1D & 7K60FXD 12.5kHz Voice: 7K60F1E & 7K60FXE Combination of 12.5kHz Voice and Data: 7K60F1W	
Digital Vocoder Type	AMBE +2™	
Digital Protocol	ETSI TS 102 361-1, -2, -3	

	810C		810D		810E		810F		810G	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
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
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
Temperature Shock	503.1	-	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	505.3	I	505.4	I	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	507.3	II	507.4	-	507.5	II - Aggravated
Salt fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	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



For more information on how SL1600 can keep you efficiently connected, visit [www.motorolasolutions.com/mototrbo](http://www.motorolasolutions.com/mototrbo) or find your closest Motorola representative or authorised Partner at [www.motorolasolutions.com/contactus](http://www.motorolasolutions.com/contactus)

Availability 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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