

MOTOTRBO[™] SL300 PORTABLE RADIO

PORTABILITY AND SIMPLICITY REDEFINED



CH-CH+

DATA SHEET | SL300 PORTABLE RADIO

The MOTOTRBO[™] SL300 provides reliable push-to-talk communication for the mobile, everyday user in an ultra-slim and rugged profile. Whether you're coordinating a school event or working in the field, the SL300 is boldly designed to keep you efficiently connected.

The latest technology works to make operation of the SL300 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 SL300 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 SL300 utilizes digital and analog radio technology concurrently to fit seamlessly into your existing communication system.

ULTRA-SLIM PROFILE

Measuring under an inch thick, the SL300 is ultra-portable. A stubby antenna, curved edges and rugged frame make the SL300 the perfect work partner. It can be easily carried in pockets and purses without snagging or bulging.

SIMPLE OPERATION

SL300 has been designed for easy, intuitive use. The Active View display uses a matrix of LEDs behind the radio housing to communicate radio information. The side volume control, dedicated power button, prominent push-totalk 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 SL300 is outfitted with the latest technology for performance and ease of use. It has trunking capability, and is supported on small Capacity Plus systems. The SL300 features Range Max: an advanced technology which delivers enhanced communication capability with a slim profile and long battery life. The SL300 3W digital radio with Range Max delivers communication performance equivalent to most 4W digital radios.

RUGGED AND RELIABLE

The SL300 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.

| GENERAL SPECIFICATIONS | | | | |
|---|---|--|------------|-------------|
| | v | HF | UHF B | AND 1 |
| | PLAIN | DISPLAY | PLAIN | DISPLAY |
| Channel Capacity | 2 | 99 | 2 | 99 |
| Typical RF Output | | | | |
| Low Power Output High Power Output Analog Digital | 1W 2W 3W - with Range Max technology | | | |
| | 3W digital rad | io with Range Max technolo equivalent to most | | performance |
| Frequency | 136-1 | 74 MHz | 403-4 | 70 MHz |
| Dimensions (H x W x L) | 4.95 X 2.17 x 0.87 in (125.7 X 55.0 X 22.0 mm) | | | |
| Weight with Battery | 5.96 oz (168.9 g) 5.84 oz (165.6 | | (165.6 g) | |
| Power Supply | 3.7V (Nominal) | | | |
| Battery Life ¹ [Li-Ion (2300mAh) Battery] Analog (hours) Digital (hours) | 12.5 15 | 11.8 14 | 12.5 15 | 11.8 14 |
| FCC Description | AZ489FT3835 AZ489FT4922 | | FT4922 | |
| IC Description | 109U-89FT3835 109U-89FT4922 | | 9FT4922 | |
| RECEIVER | | | | |
| | v | HF | UHF B | AND 1 |
| Frequency | 136-174 MHz 403-470 MHz | | 70 MHz | |
| Channel Spacing | | 12.5 kHz | / 25 kHz² | |
| Frequency Stability (-30°C, +60°C, +25°C Ref) | | ± 1.5 | ppm | |
| Analog Sensitivity (12 dB SINAD) | 0.3 uV 0.22 uV (typical) | | | |
| Digital Sensitivity (5% BER) | 0.25 uV 0.19 uV (typical) | | | |
| Intermodulation (TIA603D) | 70dB | | | |
| Adjacent Channel Selectivity (TIA603D) | 45 dB @ 12.5 kHz 70 dB @ 25 kHz ² | | | |
| Spurious Rejection (TIA603D) | 70 dB | | | |
| Rated Audio | | 0.5 W (I | nternal) | |
| Audio Distortion @ Rated Audio | 5% (3% typical) | | | |
| Hum and Noise | -40 dB @ 12.5 kHz -45 dB @ 25 kHz ² | | | |
| Audio Response | TIA603D | | | |
| Conducted Spurious Emissions (TIA603D) | -57 dBm | | | |



¹ Average battery life at 5/5/90 duty cycle, transmitter in high power. Actual battery runtime observed may vary. ² 25 kHz operation is not available in the U.S.

Specifications subject to change without notice. All specifications shown are typical.

Actual field communication performance will vary, depending on factors such as terrain, weather conditions, electromagnetic interference and obstructions.



| VHF UHF BAND 1 Frequency 136-174 MHz 403-470 MHz Channel Spacing 12.5 kHz / 25 kHz / Frequency Stability - (30°C, +25°C Ref) ± 1.5 ppm Low Power Output High Power Output Digital 1W 2W Digital - with Range Max technology 3W digital radio with Range Max technology and with anale Max technology provides communication performance equivalent to most 4W digital radios. Modulation Limiting ± 2.5 kHz @ 12.5 kHz ± 5.0 kHz @ 25 kHz' FM Hum and Noise -40 dB @ 12.5 kHz ± 5.0 kHz @ 25 kHz' Conducted / Radiated Emission -36 dBm < 1 GHz -30 dBm > 1 GHz Adjacent Channel Power 60 dB @ 12.5 kHz -30 dBm > 1 GHz Audio Distortion 3% (typical) Audio Distortion 12.5 kHz bata: 7K60F10 & 7K60FXD 12.5 kHz bata: 7K60F10 & 7K60FXD 12.5 kHz Data: 7K60F10 & 7K60FXD 12.5 kHz Voice and Data: 7K60F1W Digital Modulation 12.5 kHz toice and Data: 7K60F1W | | |
|--|----|---------|
| Channel Spacing 12.5 kHz / 25 kHz ' Frequency Stability (30°C, +0°C, +25°C Ref) ± 1.5 ppm Low Power Output High Power Output Digital 1W 2W 3W digital radio with Range Max technology 3W digital radio with Range Max technology provides communication performance equivalent to most 4W digital radios. Modulation Limiting ± 2.5 kHz @ 12.5 kHz ± 5.0 kHz @ 25 kHz' FM Hum and Noise -40 dB @ 12.5 kHz -45 dB @ 25 kHz' Conducted / Radiated Emission -30 dBm > 1 GHz -30 dBm > 1 GHz Adjacent Channel Power 60 dB @ 12.5 kHz -70 dB @ 25 kHz' Audio Distortion 3% (typical) 4FSK Digital Modulation 12.5 kHz / 2000 Digital Vocoder Type AMBE +2 TM | | |
| Frequency Stability (-30°C, +60°C, +25°C Ref) ± 1.5 ppm Low Power Output High Power Output Digital 1W 2W 3W • with Range Max technology 3W SW digital radio with Range Max technology provides communication performance equivalent to most 4W digital radios. Modulation Limiting ± 2.5 kHz ± 5.0 kHz 25 kHz ¹ FM Hum and Noise -40 dB @ 12.5 kHz Conducted / Radiated Emission -36 dBm < 1 GHz | | |
| (-30°C, +60°C, +26°C Ref) ± 1.5 ppm Low Power Output High Power Output Digital Analog Digital 2W 3W digital radio with Range Max technology 3W 3W digital radio with Range Max technology provides communication performance equivalent to most 4W digital radios. 3W digital radio with Range Max technology provides communication performance equivalent to most 4W digital radios. Modulation Limiting ± 2.5 kHz @ 12.5 kHz ± 5.0 kHz @ 25 kHz' FM Hum and Noise -40 dB @ 12.5 kHz -45 dB @ 25 kHz' Conducted / Radiated Emission -36 dBm < 1 GHz -30 dBm > 1 GHz Adjacent Channel Power 60 dB @ 12.5 kHz -70 dB @ 25 kHz' Audio Response TIA603D Audio Distortion 3% (typical) 4FSK Digital Modulation 12.5 kHz Data: 7K60F1D & 7K60FXE Combination of 12.5 kHz Voice: 7K0F1E & 7K60F1E A 7K0F1E & 7K60F1E Digital Vocoder Type AMBE +2 TM | | |
| High Power Output Analog 2W with Range Max technology JW digital radio with Range Max technology provides communication performance equivalent to most 4W digital radios. 3W Modulation Limiting ± 2.5 kHz @ 12.5 kHz FM Hum and Noise -40 dB @ 12.5 kHz Conducted / Radiated -40 dB @ 12.5 kHz Emission -36 dBm < 1 GHz | | |
| Modulation Limiting ± 2.5 kHz @ 12.5 kHz FM Hum and Noise -40 dB @ 12.5 kHz -40 dB @ 12.5 kHz -45 dB @ 25 kHz' Conducted / Radiated -36 dBm < 1 GHz | | |
| FM Hum and Noise -40 dB @ 12.5 kHz -45 dB @ 25 kHz' -45 dB @ 25 kHz' Conducted / Radiated -36 dBm < 1 GHz | | |
| Conducted / Radiated -36 dBm < 1 GHz | | |
| TO dB @ 25 kHz¹ Audio Response Audio Distortion 3% (typical) 4FSK Digital Modulation 12.5kHz Data: 7K60F1D & 7K60FXD 12.5kHz Voice: 7K60F1E & 7K60F1W Digital Vocoder Type | _ | |
| Audio Distortion 3% (typical) 4FSK Digital Modulation 12.5kHz Data: 7K60F1D & 7K60FXD 12.5kHz Voice: 7K60F1E & 7K60FXE 12.5kHz Voice: 7K60F1E & 7K60F1W Digital Vocoder Type AMBE +2 TM | _ | |
| 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™ | | |
| 12.5kHz Voice: 7K60F1E & 7K60FXE Combination of 12.5kHz Voice and Data: 7K60F1W Digital Vocoder Type AMBE +2™ | | |
| | | |
| Digital Protocol ETSL TS 102 361-1, -2, -3 | | |
| | | |
| 810C 810D 810E 810F | 81 | |
| Applicable MIL-STD Methods Procedures Methods Procedures Methods Procedures Methods Procedures Methods | P | Methods |
| Low Pressure 500.1 I 500.2 II 500.3 II 500.4 II 500.5 | 1 | 500.5 |
| 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 | l, | 501.5 |
| 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 | l, | 502.5 |
| Temperature Shock 503.1 - 503.2 I/A1/C3 503.3 I/A1/C3 503.4 I 503.5 | I, | 503.5 |
| Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5 | I, | 505.5 |
| Rain 506.1 I, II 506.2 I, II 506.3 I, II 506.4 I, III 506.5 | I, | 506.5 |
| Humidity 507.1 II 507.2 II 507.3 II 507.4 - 507.5 | 1 | 507.5 |
| Salt fog 509.1 - 509.2 - 509.3 - 509.4 - 509.5 | - | 509.5 |
| Dust 510.1 I 510.2 I 510.3 I 510.4 I 510.5 | 1 | 510.5 |
| 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, | |
| Shock 516.2 I, II 516.3 I, IV 516.4 I, IV 516.5 I, IV 516.6 | ' | 514.6 |

ENVIRONMENTAL SPECIFICATIONS

| Operating Temperature ² | -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 |
| | |

¹ 25 kHz operation is not available in the U.S.

 2 Radio only. Operating temperature specification for a Li-lon battery is -10°C to +60°C.

Specifications subject to change without notice. All specifications shown are typical. Actual field communication performance will vary, depending on factors such as terrain, weather conditions, electromagnetic interference and obstructions

MOTOTRBO SL300 SERIES ACCESSORIES



PMLN7076

CARRY ACCESSORIES

Our versatile portfolio includes a flexible hand strap, rotating heavy duty belt clip, and swivel carry holster. A nylon wrist strap also can 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 SL300 with high efficiency stubby antennas. Colored antenna ID bands are available for easy customization.

| 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) |
| | |

For more information, go to www.motorolasolutions.com/sl300

Motorola Solutions, Inc. 500 West Monroe Street, Chicago, II 60661 U.S.A. motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2016 Motorola Solutions, Inc. All rights reserved. 11-2016



AUDIO ACCESSORIES

MOTOTRBO audio accessories for SL300 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 |
|------------|--|
| PMLN7189 | Swivel Earpiece with in-line microphone and push-to-talk |
| PMLN7156 | Mag One Earbud with in-line microphone and push-to-talk |
| PMLN7157 | 2-Wire Surveillance Kit with translucent tube, black |
| PMLN7158 | 1-Wire Surveillance Kit with in-line microphone and push-to-talk, black |
| PMLN7159 | Adjustable D-style earpiece with in-line microphone and push-to-talk, black Available 01 2015 |
| RLN6242 | Low Noise Kit with translucent tube and 1 clear rubber eartip |
| 5080384F72 | Replacement Foam Plugs for RLN6242. Noise Reduction = 24dB. Pack of 50 pairs. |
| RLN6282 | Replacement standard clear rubber eartip for RLN6242. Pack of 50 |



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 |
| 25009298001 | Micro-USB Single-Unit Rapid Rate 5V/1A, Plug-In Power Supply, 5W, 100V-240V (US plug) |
| PMLN7101 | Six-Pocket Multi-Unit Rapid Rate Charger, 90V-264V (US plug) |
| PMLN7109 | Single-Unit Rapid Rate Charger 5V/1A, 5W, 100V-240V (US Plug) |
| CB000262A01 | Micro USB Programming Cable |



