
MOTOTRBO™ SLR 8000 BASE STATION / REPEATER

For better safety and efficiency throughout your organization, you need reliable voice and data communications that connect everyone and everything. The MOTOTRBO SLR 8000 repeater delivers high performance, high reliability two-way radio service, optimized for your workplace.



The SLR 8000 is engineered for high performance, reliability and flexibility and represents the next generation in repeaters.

For optimal safety and efficiency, your organization requires dependable voice and data connectivity to keep everyone and everything in sync. The MOTOTRBO SLR 8000 repeater delivers high-performance, reliable two-way radio service that's tailored for your workplace.

Whether you need a simple single-site conventional system, expansive coverage through IP Site Connect, or the robust trunking capabilities of Capacity Plus, Capacity Max, or Connect Plus, the SLR 8000 brings the power of digital two-way radio to your workforce. It can also operate as an analog repeater (conventional or MPT 1327), or as a mixed-mode analog/digital repeater during your transition from legacy analog systems.

GENERAL SPECIFICATIONS

	VHF	UHF	800/900
Frequency Range	136 - 174 MHz	400 - 470 MHz	800 RX: 806 - 825 MHz TX: 851 - 870 MHz 900 RX: 896 - 902 MHz TX: 935 - 941 MHz
Channel Spacing	25* / 12.5 kHz		12.5 / 20 kHz / 30 kHz
Channel Step Size	5 Hz		
Frequency Stability	+ / - 0.5 PPM		+ / - 0.1 PPM
Channel Capacity	64		
RF Output Power	1 - 100 W		
Dimensions (H x W x D)	3.5 x 19 x 17.25 in (89 x 483 x 438 mm)		
Weight	31 lbs (14.1 kg)		
Input Voltage (AC)	100 - 240 Vac, 47 - 63 Hz		
Current (standby), 110 / 240 V	0.25 / 0.3 A		0.27 / 0.31 A
Current (transmitting at 100 W), 110 / 240 V	2.1 / 1.1 A (typical)	2.0 / 1.1 A (typical)	2.8 / 1.3 A (typical)
Input Voltage (DC)	12 V (11.0 - 15.5 V) / 24 V (21.6 - 32.0 V)		
Current (standby), 24 V	0.5 A		0.6 A
Current (transmitting at 100 W), 24 V	8.6 A (typical)	8.2 A (typical)	12 A
Input Power Modes	AC only, DC only, AC with Battery Revert		
Operating Temperature Range	-22 to +140 °F (-30 to +60 °C)		
Humidity	RH of 95%, Non-condensing at 50 °C (122 °F)		
Max Duty Cycle	100%		
Digital Vocoder Type	AMBE+2™		
Battery Charger Capacity (12 / 24 V)	5 A		
Connectivity, front panel	USB B Receptacle, Microphone (RJ45), Speaker (integrated)		
Connectivity, rear panel	Tx (N female), Rx (BNC female), USB A Receptacle, 2x Ethernet, DB25 Accessory Connector, External Reference (BNC Female)		
External Reference	5 / 10 MHz (Auto-detect)		
Supported System Types	Digital Conventional, IP Site Connect, Capacity Plus, Capacity Max, Connect Plus Analog Conventional, Analog Conventional Voting, MPT 1327		
Audio Types	Input: Balanced (600 ohms and Country-specific Impedances), Unbalanced (1000 ohms), Microphone Accessory Port. Output: Balanced (600 ohms and Country-specific Impedances), Unbalanced (600 ohms), Integrated Speaker.		
Audio Levels	Input: Balanced: +10 to -30 dBm, Unbalanced: Adjustable, 80 mV rms nominal for 60% RSD. Output: Balanced: +7 to -30 dBm, Unbalanced: Adjustable, 330 mV rms nominal @ 60% RSD.		
FCC Emission Designators	11K0F3E, 16K0F3E, 7K60FXD, 7K60F7D, 7K60FXE, 7K60F7E, 7K60F7W		11K0F3E, 16K0F3E, 7K60FXD, 7K60F7D, 7K60FXE, 7K60F7E, 7K60F7W, 21K7D7E, 21K7D7D, 21K7D7W
FCC Type Acceptance	ABZ99FT3095B	ABZ99FT4098B	ABZ99FT5101B
IC Description	109AB-99FT3095B	109AB-99FT4098B	109AB-99FT5101B

RECEIVER

	VHF	UHF	800/900
Frequency Range	136 - 174 MHz	400 - 470 MHz	806 - 825 MHz 896 - 902 MHz
Sensitivity, 12dB SINAD	0.3 uV (0.22 uV typical)		0.28 uV (0.18 uV typical)
Sensitivity, 5% BER	0.25 uV (0.18 uV typical)		0.28 uV (0.18 uV typical)
Selectivity (TIA603E), 25* / 12.5 kHz	83 / 52 dB	78 / 52 dB	78 / 52 dB
Selectivity (TIA603), 25* / 12.5 kHz	83 / 75 dB	80 / 75 dB	80 / 75 dB
Intermodulation Rejection (TIA603E/ETSI)	85 / 73 dB (87 / 78 dB typical)		85 / 73 dB (88 / 79 dB typical)
Spurious Rejection (TIA603E/ETSI)	85 / 75 dB (95 / 90 dB typical)		90 / 75 dB (105 / 90 dB typical)
Audio Distortion	< 3% (<1.5% typical)		
Hum and Noise, 25* / 12.5 kHz	-50 / -45 dB (-56 / -52 dB typical)		
Blocking	> 110 dB (113 dB typical)		

TRANSMITTER

	VHF	UHF	800/900
Frequency Range	136 - 174 MHz	400 - 470 MHz	851 - 870 MHz 935 - 941 MHz
RF Output Power	DC (24 V) or AC 1 - 100 W DC (12 V) 1 - 50 W		
Max Duty Cycle	100%		
Intermodulation Attenuation	55 dB		
Adjacent Channel Power (TIA603E), 25* / 12.5 kHz	75 / 60 dB		
Adjacent Channel Power (ETSI), 25* / 12.5 kHz	75 / 60 dB (78 / 62 dB typical)	70 dB / 63 dB (82 / 76 dB typical)	
Conducted Spurious Emissions	-36dBm		
Audio Response	TIA603D		
Audio Distortion	< 3% (<1% typical)		
Hum and Noise, 25* / 12.5 kHz	-50 / -45 dB (-55 / -52 dB typical)		
Rated System Deviation, 25* / 12.5 kHz	±5.0 / ±2.5 kHz		

PRODUCT MEETS

- ETSI 300-086
- ETSI 300-113
- TIA/EID603D
- CE Marked
- RoHS2-Compliant
- UL Listed
- Digital Protocol
-ETSI 102 361-1, -2, -3, -4



**Images show product equipped with optional modules

NOTES

* 25 kHz channels not available in the US.
 Availability is subject to individual country law and regulations.
 All specifications shown are guaranteed unless otherwise stated and are subject to change without notice.
 Specifications are for unit excluding options, unless otherwise stated.

NEXT GENERATION MOTOTRBO REPEATER

The SLR 8000 represents a significant advancement in both design and technology. Built on extensive field experience, customer feedback, and innovation, this product delivers exceptional performance and reliability for your business's two-way radio system. With an efficient modular design and flexible installation options, the SLR 8000 truly sets the standard for next-generation repeaters.

HIGH PERFORMANCE

With a 100W transmitter output and high-sensitivity receiver input, the SLR 8000 provides radio coverage over an expansive area. Its excellent performance makes it ideal for congested sites requiring more precise specifications. The SLR 8000 supports the full MOTOTRBO feature set and is compatible with all MOTOTRBO system architectures: single-site conventional, IP Site Connect, Capacity Plus, Capacity Max, and Connect Plus. The IP interface also allows you to integrate applications and consoles directly into your system.

To ensure your system performs at its best, MOTOTRBO RF Planning and IP Integration Services are available for purchase.

HIGH RELIABILITY

The SLR 8000 guarantees reliable, round-the-clock operation, even at its continuous 100W transmit power. The high-quality design has passed Motorola's Accelerated Life Testing (ALT) program, meeting strict quality standards. Featuring a next-generation receiver with improved sensitivity and noise reduction, you can be assured of clear voice quality even under challenging conditions.

The SLR 8000 features internal monitoring circuitry that allows you to measure critical parameters such as input voltage, current, output power, module temperatures, and VSWR. This data can be accessed either through the front panel maintenance interface or via remote management applications like RDAC. Additionally, five years of service coverage are included, protecting your hardware investment with expert repair services, proactive technical support, software updates, and more.

TOTAL FLEXIBILITY

The SLR 8000 offers customization options to meet the specific needs of your operation. You can choose from options such as an internal preselector and antenna relay module for a compact, one-box installation. For those requiring tone control, 4-wire audio, and extra external inputs, an internal wireline card is available.

Power supply options include 110-240 Vac, 12-24 Vdc, or AC with battery backup, plus a built-in 5A battery charger. This 2U unit is designed to mount efficiently in a rack without requiring additional ventilation space above or below. Serviceability is also enhanced with local voice capability, featuring an internal speaker, volume control, and support for an external microphone.

MOTOTRBO SLR 8000

Combining excellent performance, high reliability, and flexible design in a compact and efficient unit, the SLR 8000 repeater serves as the backbone of a premium MOTOTRBO professional two-way radio system.

For more information on how to make your business more efficient and better connected, visit www.motorolasolutions.com/mototrbo

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