



CLR Series two-way radio

Small. Versatile. Powerful.

Clear communication is critical for all teams. Whether you are supervising a production line, monitoring the school playground, serving customers in a store, or managing an office, you need to be able to connect instantly and share information with your team. The CLR Series is your essential communication tool built to last all day, every day.

The CLR Series is small, lightweight and easy to use. This radio with its push-to-talk (PTT) operation is ready for communication in an instant. Reduce missed messages with louder and clearer audio from the built-in speaker or compatible headsets for precise communication between users. All this performance is protected by a rugged radio housing and long lasting battery.

The CLR Series is ready to provide all day performance and is customisable to your work environment with licensed and unlicensed radio models and a range of radio accessories including chargers, carry options and earpieces.





Features to keep you connected



Stylish, Compact and Durable Design

A sleek design, small enough to fit in the palm of your hand. IP52 and Military Standard 810H rated to survive dust, water, vibration, shock and temperature extremes.



Oversized PTT Button

Easily located for instant use without the need to look at the radio.



Up to 18 hour Battery Life

Power through a full shift with up to 18 hours of battery life from a full charge.



Audio, Carry, and Charging Accessories

Compliment your workstyle with a variety of accessories designed for the CLR Series.



Escalate Call

Initiate an important call or alert users on another channel to immediately communicate a message in high-risk situations, keeping your teams and assets safer when an incident occurs.



Voice Guided Navigation

Help your staff to easily learn the system with voice guided menus. The CLR allows you to use pre-defined voice prompts for your channels or add custom voice prompts to help your staff identify the channel they should be using.



16 Channels & 219 Privacy Codes¹

Multiple channels give you the flexibility to keep different teams on separate channels and keep your staff focused on their roles. Privacy codes can be added to protect communications from neighbouring groups.

Additional Features

- · VOX hands free
- 6 call tones
- Mute
- 15 volume levels
- · Scan/monitor
- Antimicrobial coating²
- Customer programming software (CPS)
- 0.5W Loudspeaker
- 8-Colour LED for channel, mode, and battery indication





General Specifications

<u> </u>			
	CLR446		
Frequency Band	PMR446 ¹ 446.0-446.2 MHz		
Range ³ Unit to Unit: With Repeater (for reference):	$14,000 \text{m}^2 (150,000 \text{ft}^2) / 10 \text{floors}$ -		
Channel Capacity	164		
Repeater Capability	No		
Channel Bandwidth	12.5 kHz		
PL Codes (Privacy Codes)	39 std + 6 custom		
DPL Codes (Privacy Codes)	84 std + 84 inverted + 6 custom		
Average Battery Life @ 5/5/90 with Standard Li-lon Battery BT90 1800 mAh ⁵	18 hours		
Radio Dimensions (H x W x D):	107 x 51 x 23 mm		
Weight: Radio w/Standard Li-Ion Battery BT90	126g		

Transmitter

		CLR446
RF Output	High: Low:	0.5 Watts
Frequency Stability		+/- 1.5kHz
Spurs & Harmonics	@ < 1GHz: @ > 1GHz:	< - 42 dBm < - 36 dBm
FM Hum & Noise	@ 12.5 kHz without companding: @ 20/25 kHz:	- 40 dB -
Modulation Limiting	@ 12.5 kHz: @ 20 kHz: @ 25 kHz:	± 2.5 kHz - -
Adjacent Channel Power	@ 12.5 kHz: @ 20/25 kHz:	60 dBc
Radiated Spurious Emissions (<1 GHz)		< - 36 dBm
Radiated Spurious Emissions (>1 GHz)		< - 30 dBm
Audio Distortion		< 2%

Receiver

		CLR446
Sensitivity (20 dB SINAD)		-118 dBm (0.282 uV)
Adjacent Channel Selectivity	@ 12.5 kHz: @ 20/25 kHz:	> 60 dB -
Intermodulation Rejection		> 63 dB
Spurious Response Rejection		>70 dB
Audio Distortion		< 5%
CSQ Hum & Noise	@ 12.5kHz: @ 20/25 kHz:	- 50 dB -
PL Hum & Noise	@ 12.5kHz: @ 20/25 kHz:	- 50 dB
Radiated Spurious Emissions (< 1GHz)		< - 63 dBm
Radiated Spurious Emissions (> 1GHz)		< - 53 dBm
Audio Output @ <5% Distortion		500 mW @ 8 ohms

Environmental Specs

Operating Temperature	- 30°C to + 60°C ⁶ (Radio)	
Shock & Vibration	Polycarbonate Housing Passes EIA 603	
Humidity	Satisfied EIA 603	
Dust & Water Intrusion	IP52	

Data Sheet | CLR Series Page 3



Military Standards

MIL-STD 810 C	MIL-STD 810 D	MIL-STD 810 E	MIL-STD 810 F	MIL-STD 810 G	MIL-STD 810 H
500.1 / Procedure I	500.2 / Procedure II	500.3 / Procedure II	500.4 / Procedure II	500.6 / Procedure II	500.6/ Procedure II
501.1 / Procedure I, II	501.2 / Procedure I/A1, II/A1	501.3 / Procedure I/A1, II/A1	501.4 / Procedure I/HOT, II/HOT	501.6 / Procedure I/A1, II/A1	501.7/ Procedure I/A1, II/A1
502.1 / Procedure I	502.2 / Procedure I/C3, II/C1	502.3 / Procedure I/ C3, II/C1	502.4 / Procedure I/C3, II/C1	502.6 / Procedure I/ C3, II/C1	502.7 / Procedure I/C3, II/C1
503.1 / Procedure I	503.2 / Procedure I/A1C3	503.3 / Procedure I/A1C3	503.4 / Procedure I	503.6 / Procedure I/C	503.7 / Procedure I/C
505.1 / Procedure II	505.2 / Procedure I	505.3 / Procedure I	505.4 / Procedure I	505.6 / Procedure I/A1	505.7 / Procedure I/A1
514.2 / Procedure VIII/F,XI	514.3 / Procedure I/10, II/3	514.4 / Procedure I/10, II/3	514.5 / Procedure I/24, II/5	514.7 / Procedure I/24, II/5	514.8 / Procedure I/24, II/5
516.2 / Procedure II	516.3 / Procedure IV	516.4 / Procedure IV	516.5 / Procedure IV	516.7 / Procedure IV	516.8 / Procedure IV
	500.1 / Procedure I 501.1 / Procedure I, II 502.1 / Procedure I 503.1 / Procedure I 505.1 / Procedure II 514.2 / Procedure VIII/F,XI	500.1 / Procedure 1 500.2 / Procedure 1 501.1 / Procedure 1 501.2 / Procedure 1 1 501.2 / Procedure 1 1 1 1 1 1 1 1 1	500.1 / Procedure I 500.2 / Procedure II 500.3 / Procedure II 501.1 / Procedure I, II 501.2 / Procedure I/A1, II/A1 501.3 / Procedure I/A1, II/A1 502.1 / Procedure I 502.2 / Procedure I/C3, II/C1 502.3 / Procedure I/C3, II/C1 503.1 / Procedure I 503.2 / Procedure I/A1C3 503.3 / Procedure I/A1C3 505.1 / Procedure II 505.2 / Procedure I/A1C3 505.3 / Procedure I/A1C3 514.2 / Procedure VIII/F,XI 514.3 / Procedure I/A1C3 514.4 / Procedure I/A1C3	500.1 / Procedure I 500.2 / Procedure II 500.3 / Procedure II 500.4 / Procedure II 501.1 / Procedure I, II 501.2 / Procedure I/A1, II/A1 501.3 / Procedure I/A1, II/A1 501.4 / Procedure I/A0, II/A1 502.1 / Procedure I 502.2 / Procedure I/C3, II/C1 502.3 / Procedure I/C3, II/C1 502.4 / Procedure I/C3, II/C1 503.1 / Procedure I 503.2 / Procedure I/A1C3 503.3 / Procedure I/A1C3 503.4 / Procedure I/A1C3 505.1 / Procedure II 505.2 / Procedure I 505.3 / Procedure I 505.4 / Procedure I 514.2 / Procedure VIII/F,XI 514.3 / Procedure I/10, II/3 514.4 / Procedure I/24, II/5	500.1 / Procedure I 500.2 / Procedure II 500.3 / Procedure II 500.4 / Procedure II 500.6 / Procedure II 501.1 / Procedure I, II 501.2 / Procedure I/A1, II/A1 501.3 / Procedure I/HOT, II/HOT 501.6 / Procedure I/HOT, II/HOT 501.6 / Procedure I/HOT, II/HOT 502.1 / Procedure I 502.2 / Procedure I/C3, II/C1 502.3 / Procedure I/C3, II/C1 502.4 / Procedure I/C3, II/C1 502.6 / Procedure I/C3, II/C1 503.1 / Procedure I 503.2 / Procedure I/A1C3 503.3 / Procedure I/A1C3 503.4 / Procedure I 503.6 / Procedure I/C 505.1 / Procedure II 505.2 / Procedure I 505.3 / Procedure I 505.4 / Procedure I 505.6 / Procedure I/A1 514.2 / Procedure VIII/F,XI 514.3 / Procedure I/A1 / Procedure I/A1, II/A1 514.5 / Procedure I/A24, II/5 514.7 / Procedure I/A24, II/5

¹Restricted to 8 unlicensed channels in Russia by law. Please refer to user guide. Only 446.0–446.1 MHz analogue frequencies are available by default. 446.1–446.2 MHz analogue frequencies should only be used in countries where these frequencies are allowed by government authorities.

For more information, please visit motorolasolutions.com/CLR

Motorola Solutions Ltd. Nova South, 160 Victoria Street, London, SW1E 5LB, United Kingdom.

Availability is subject to individual country law and regulations. All specifications shown are typical unless otherwise stated and are subject to change without notice.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. $All other trademarks are the property of their respective owners. @2024 \ Motorola \ Solutions, Inc. \ All \ rights reserved. (01/24) \ Motorola \ Solutions, Inc. \ All \ rights reserved. (01/24) \ Motorola \ Solutions, Inc. \ All \ rights reserved. (01/24) \ Motorola \ Solutions, Inc. \ All \ rights reserved. (01/24) \ Motorola \ Solutions, Inc. \ Motorola \ Motorola \ Solutions, Inc. \ Motorola \ M$



²The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other disease organisms. Always clean this product thoroughly before and after each use. Does not apply to accessories.

 $^{{}^{\}rm 3}\textsc{Range}$ achieved will vary dependant on terrain and local conditions. ⁴8 channels are available by default, expandable to 16.

⁵Average battery life at 5/5/90 duty cycle, transmitter in high power. Actual battery runtime observed may vary.
⁶Radio only, battery operating temperature -10°C to +60°C.