



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

	CLR446	CLR PLUS
Frequency Band	PMR446 ¹ 446.0-446.2 MHz	UHF 450-470 MHz
Range ³	Unit to Unit: 14,000 m ² (150,000 ft ²) / 10 floors With Repeater (for reference): -	18,580 m ² (200,000 ft ²) / 15 floors 37,160 m ² (400,000 ft ²) / 30 floors
Channel Capacity	16 ⁴	16 ⁴
Repeater Capability	No	Yes
Channel Bandwidth	12.5 kHz	12.5/20/25 kHz
PL Codes (Privacy Codes)	39 std + 6 custom	39 std + 6 custom
DPL Codes (Privacy Codes)	84 std + 84 inverted + 6 custom	84 std + 84 inverted + 6 custom
Average Battery Life @ 5/5/90 with Standard Li-Ion Battery BT90 1800 mAh ⁵	18 hours	16 hours
Radio Dimensions (H x W x D):	107 x 51 x 23 mm	107 x 51 x 23 mm
Weight: Radio w/Standard Li-Ion Battery BT90	126g	127g

TRANSMITTER

	CLR446	CLR PLUS
RF Output	High: 0.5 Watts Low: -	1 Watt 0.5 Watts
Frequency Stability	+/- 1.5kHz	+/- 1.5kHz
Spurs & Harmonics	@ < 1GHz: < -42 dBm @ > 1GHz: < -36 dBm	< -42 dBm < -36 dBm
FM Hum & Noise	@ 12.5 kHz without companding: -40 dB @ 20/25 kHz: -	-40 dB -45 dB
Modulation Limiting	@ 12.5 kHz: ± 2.5 kHz @ 20 kHz: - @ 25 kHz: -	± 2.5 kHz ± 4.0kHz ± 5.0 kHz
Adjacent Channel Power	@ 12.5 kHz: 60 dBc @ 20/25 kHz: -	60 dBc 70 dBc
Radiated Spurious Emissions (<1 GHz)	< -36 dBm	< -36 dBm
Radiated Spurious Emissions (>1 GHz)	< -30 dBm	< -30 dBm
Audio Distortion	< 2%	< 2%

RECEIVER

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



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
Low Pressure	500.1 / Procedure I	500.2 / Procedure II	500.3 / Procedure II	500.4 / Procedure II	500.6 / Procedure II	500.6 / Procedure II
High Temperature	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
Low Temperature	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
Temperature Shock	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
Solar Radiation	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
Vibration	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
Shock	516.2 / Procedure II	516.3 / Procedure IV	516.4 / Procedure IV	516.5 / Procedure IV	516.7 / Procedure IV	516.8 / Procedure IV

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.

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.

³Range 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.

For more information, please visit motorolasolutions.com/CLR

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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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