zenitel

DATASHEET



1015751

MOTOTRBO R5 UHF LKP

UHF Radio with Display and Limited Keypad

- 400–527 MHz
- 256 channels
- 1.5″ monochrome display and limited keypad
- Integrated GNSS location tracking
- 2200 mAh IMPRES Li-ion battery
- AI-trained noise suppression
- Programmable audio loudness up to 106 phons
- IP67 dust and water protection

UHF Marine | IP67 | Active Noise Cancelling

Description

The MOTOTRBO R5 UHF LKP is a digital portable two-way radio with a monochrome display, limited keypad and integrated GNSS. Clear audio, intuitive controls and a compact, rugged design support everyday communication for crews working onboard vessels, in ports and across industrial facilities.

MOTOTRBO R5 UHF LKP

The MOTOTRBO R5 UHF LKP combines push-to-talk communication with a 1.5″ display for viewing radio status and navigating functions. Large rotary controls and a tactile push-to-talk button make the radio easy to operate when wearing gloves, while programmable buttons provide shortcuts to frequently used features.

AI-trained noise suppression helps reduce background noise from machinery and other equipment. A wideband

www.zenitel.com info@zenitel.com Last revision date: 2026-10-19 15:54

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

speaker delivers programmable audio loudness up to 106 phons, while IMPRES audio and Received Audio Levelling help maintain consistent speech levels. Intelligent Audio adjusts speaker output to changing background noise in digital mode.

Integrated GNSS supports outdoor location tracking through compatible systems, helping teams coordinate personnel and resources. Support for both analogue and digital operation allows the radio to be used within existing systems and during migration to digital communication.

The R5 is rated IP67 and tested to MIL-STD-810H for demanding working conditions. The supplied 2200 mAh IMPRES battery provides a typical runtime of 20 hours in digital mode or 15.5 hours in analogue mode under Motorola's specified test conditions. R5 UHF models are maritime certified to EN 300 720 V2.1.1 and IEC/EN 60945:2002 for use onboard vessels.

Model note: This is the limited-keypad version with display and integrated GNSS. This configuration does not include Bluetooth or Wi-Fi.

Included in delivery: 2200 mAh IMPRES Li-ion IP67 battery (PMNN4888A), stubby antenna (PMAE4070A), 2.5″ belt clip (PMLN7008A) and dust cover.
Charger sold separately.

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

Specifications

GENERAL SPECIFICATIONS

Frequency Range	400–527 MHz
Display	1.5″ monochrome display, 132 × 48 px
Keypad	Limited keypad
Channel Spacing	12.5 kHz, 20 kHz, 25 kHz
Channel Capacity	256
Zone Capacity	50
Dimensions (H × W × D)	122 × 56 × 35 mm
Weight with 2200 mAh Battery	285 g
Battery	IMPRES Li-ion IP67, 2200 mAh (PMNN4888A)
Digital / Analogue Battery Life	20 / 15.5 hours*
Location Tracking	GNSS: GPS, GLONASS, BeiDou, Galileo

TRANSMITTER SPECIFICATIONS

RF Power Output (High / Low)	4 W / 1 W
Digital Protocol	ETSI TS 102 361-1, -2, -3; DMR Tier II
Frequency Stability	±0.5 ppm

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

RECEIVER SPECIFICATIONS

Analogue Sensitivity (12 dB SINAD)	0.16 µV
Digital Sensitivity (5% BER)	0.14 µV
Spurious Rejection (ETSI / TIA603E)	70 dB

AUDIO SPECIFICATIONS

Audio Output Power (Rated / Maximum)	1 W / 3 W
Audio Distortion at Rated Audio	≤3%
Maximum Speech Loudness by Default	101 phons at 30 cm
Maximum Programmable Speech Loudness (Digital)	106 phons at 30 cm
Noise Suppression	AI-trained noise suppression and single microphone noise cancellation (SINC+)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature with Supplied Battery	–20 °C to +60 °C
Storage Temperature	–40 °C to +85 °C
Dust and Water Protection	IP67
Ruggedness	MIL-STD-810H
Electrostatic Discharge	IEC 61000-4-2 Level 4
Salt Fog	5% NaCl for 8 hours at 35 °C, followed by 16 hours standing

www.zenitel.com info@zenitel.com Last revision date: 2026-10-19 15:54

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

MARITIME CERTIFICATION

Maritime Standards	EN 300 720 V2.1.1; IEC/EN 60945:2002

www.zenitel.com info@zenitel.com Last revision date: 2026-10-19 15:54

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.