

# RM780 IMPRES™ REMOTE SPEAKER MICROPHONE

**HEAR AND BE HEARD CLEARLY.**



Your team needs to communicate without delay, making it essential that they can hear and be heard clearly, especially in loud environments.

Equipped with a loud and clear speaker, the wired RM780 Remote Speaker Microphone delivers our best design with the latest low profile swivel clip that keeps the RSM closer to your body. It has 2 side programmable buttons, emergency button and system volume control at the top.

The RM780 has an IP68 rated 3.5mm audio jack that supports the new receive-only translucent tube earpiece (PMLN8120). The RM780 is IP68 (2m, 4 hours) certified and supports Motorola Solutions' Work-When-Wet requirement which allows water to drain out from the RSM instantly to allow clear communication.

#### **SLIM DESIGN**

Designed for Motorola Solutions premium radios, the sleek and modern RM780 is our thinnest wired remote speaker equipped with a low profile swivel clip for easy wearability keeping the RSM closer to your body.

#### **WORK-WHEN-WET AND IP68 CERTIFIED**

Rugged and dependable, the RM780 is ready for use in harsh environments and weather. Enhanced water drainage and top quality materials ensure you get the best audio experience.

#### **DISCREET LISTENING**

Tailor the RM780's performance to your individual needs with the 3.5mm jack to receive audio discreetly by plugging in a compatible earpiece accessory for private and confidential messages.

#### **IMPRES TECHNOLOGY**

IMPRES audio technology optimises the performance of the RM780 by suppressing background noise and improving voice intelligibility, even in noisy situations. IMPRES technology automatically compensates for changes in voice level ensuring your message gets through clearly.

#### **LOUDEST, CLEAREST SPEAKER**

Innovative audio technology enables you to hear and be heard over crowd noise, machinery and blaring sirens. Motorola Solutions' Wind and Water Shielding technology ensures audio is loud and clear.

#### **EASY TO USE**

The volume rocker switch allows you to quickly and easily change system volume level and keep your eyes focused on what's in front of you. Two programmable buttons allow users to activate their most frequently used functions without even looking at the RSM. The emergency button is large and easy to operate, yet well protected from accidental activation; and there's a tactile glove-friendly PTT that allows easy communication on the job.

#### **FLEXIBLE WEARING**

Wear your RM780 any way you want. The strategic placement of the microphones and enhanced water drainage provide users with the flexibility to wear it straight, upside down and even sideways while still delivering superior audio experience.





## GENERAL SPECIFICATIONS

|   |   |
|---|---|
| Dimensions (RSM head only without clip) | 77 x 58 x 25 mm (L x W x D)   |
| Weight (Complete kit with cable)        | 212 g   |
| Power Source                            | Radio Battery   |
| Hot Microphone Feature                  | Supported through radio software configuration. Please contact your account manager for more information. |
| IMPRES™                                 | Yes   |
| Clip                                    | Low-profile 360 degree rotating clip  |
| Intrinsic Safety Rating                 | TIA4950   |
| Work-When-Wet                           | Yes   |

## MICROPHONE

|                  |                     |
|------------------|---------------------|
| Type             | Omni Directional    |
| Sensitivity      | -42 ± 3 dBV typical |
| Distortion (THD) | < 5 %, Wideband     |
| Windporting      | Yes                 |

## SPEAKER

|                                      |             |
|--------------------------------------|-------------|
| Diameter                             | 47 mm       |
| Distortion (THD)                     | <15%        |
| Max Power                            | 3Wrms       |
| Output Level at maximum radio volume | 102 dB phon |

## CONTROLS

|                   |                                    |
|-------------------|------------------------------------|
| Top               | Emergency (Orange), Volume Up/Down |
| Side              | PTT, 2 Programmable Buttons        |
| Opposite PTT Side | IP68 3.5 mm Audio Jack             |

## COILED CABLE

|                          |                          |
|--------------------------|--------------------------|
| Flex Life                | 100,000 cycles (minimum) |
| Pull Strength            | 18 kg (minimum)          |
| Cable Length             | 304mm coiled section     |
| Accessory Connector Case | Polycarbonate Black      |

## ENVIRONMENTAL

|                       |  |
|-----------------------|--|
| Operating Temperature | -30°C to +60°C                                   |
| Storage Temperature   | -55°C to +85°C                                   |
| Humidity              | 90% - 95% Relative Humidity at +50°C for 8 hours |
| Impact Grill          | 31.75 mm Diameter Steel Ball Drop                |
| ESD                   | IEC / EN 61000-4-2                               |
| IP Rating             | IP68 (2m, 4 hours)                               |

## HAZARDOUS CERTIFICATION

Div 1: Class I (Group C, D), Class II (Group E, F, G), Class III  
 Div 2: Class I (Group A, B, C, D)

## COMPATIBLE RADIO MODELS

|           |        |
|-----------|--------|
| MOTOTRBO™ | Ion    |
| Tetra     | MPX600 |

## SECONDARY AUDIO ACCESSORY

|          |   |
|----------|---|
| PMLN8120 | Receive-Only Loud Audio with Translucent Tube |
|----------|---|

## REPLACEMENT PARTS

|          |                             |
|----------|-----------------------------|
| PMLN8121 | Low Profile Swivel Clip     |
| PMLN8122 | Dust Cover (10pcs per pack) |
| PMLN4232 | Coil Cord                   |



**PORTABLE MILITARY STANDARDS 810 C, D, E, F & G**

|                     | MIL-STD 810C |                 | MIL-STD 810D |             | MIL-STD 810E |             | MIL-STD 810F |                     | MIL-STD 810G |                   |
|---------------------|--------------|-----------------|--------------|-------------|--------------|-------------|--------------|---------------------|--------------|-------------------|
|                     | Method       | Proc./Cat.      | Method       | Proc./Cat.  | Method       | Proc./Cat.  | Method       | Proc./Cat.          | Method       | Proc./Cat.        |
| Low Pressure        | 500.1        | I               | 500.2        | I           | 500.3        | II          | 500.4        | II                  | 500.5        | II                |
| High Temperature    | 501.1        | I, II           | 501.2        | I/A1, II/A1 | 501.3        | I/A1, II/A1 | 501.4        | I/Hot, II/Basic Hot | 501.5        | I/A1, II/A2       |
| 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        | I/C3, II/C1       |
| Temperature Shock   | 503.1        | I               | 503.2        | I/A1C3      | 503.3        | I/A1C3      | 503.4        | I                   | 503.5        | I/C               |
| Solar Radiation     | 505.1        | II              | 505.2        | I           | 505.3        | I           | 505.4        | I                   | 505.5        | I/A1              |
| Rain                | 506.1        | I, II           | 506.2        | I, II       | 506.3        | I, II       | 506.4        | I, III              | 506.5        | I, III            |
| Humidity            | 507.1        | II              | 507.2        | II          | 507.3        | II          | 507.4        | Only 1 Proc         | 507.5        | II/<br>Aggravated |
| Salt Fog            | 509.1        | I               | 509.2        | I           | 509.3        | I           | 509.4        | Only 1 Proc         | 509.5        | Only 1 Proc       |
| Blowing Dust        | 510.1        | I               | 510.2        | I           | 510.3        | I           | 510.4        | I                   | 510.5        | I                 |
| Blowing Sand        | Only 1 Proc  | Only 1 Proc     | 510.2        | II          | 510.3        | II          | 510.4        | II                  | 510.5        | II                |
| Immersion (Delta-T) | 512.1        | I               | 512.2        | I           | 512.3        | I           | 512.4        | I                   | 512.5        | I                 |
| 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/24              |
| Shock               | 516.2        | I, III, V       | 516.3        | I, V, VI    | 516.4        | I, V, VI    | 516.5        | I, V, VI            | 516.6        | I, V, VI          |
| Shock (Drop)        | 516.2        | II              | 516.2        | IV          | 516.4        | IV          | 516.5        | IV                  | 516.6        | IV                |

For a complete list of MOTOTRBO Ion accessories, please visit [motorolasolutions.com/mototrbo-ion-radio](https://motorolasolutions.com/mototrbo-ion-radio)

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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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