

MOTOTRBO™ ION ACCESSORIES

Tecnitrān
TELECOMUNICACIONES

MOTOROLA SOLUTIONS



MOTOTRBO ION

YOUR BUSINESS RUNS ON VOICE AND DATA. BUT IF YOUR DEVICES CAN ONLY ACCESS ONE, YOU'RE NOT RUNNING AT YOUR BEST.

MOTOTRBO™ Ion is the first business-ready communication device with all-on voice and broadband data capabilities. It brings together renowned PTT performance, an open app ecosystem on the Android platform, and access to Motorola Solutions' unified technology ecosystem—from video security and analytics solutions, to best-in-class network security, to powerful new software and technology services like smart virtual assistants.

With MOTOTRBO Ion, teams stay connected across networks and devices.Business-critical data and workflows are unified and simplified. And the capabilities your workforce needs to be at their best are always on.

KEY FEATURES

APPS ARE ON

- Android platform
- Open app ecosystem
- Motorola Solutions' unified technology ecosystem
- Full multimedia capabilities
- Intuitive touchscreen interface

UPTIME IS ON

- Fast setup and updates
- Seamless device management
- Managed and supported services

SECURITY IS ON

- Device security
- Application security
- Data security

DEPENDABILITY IS ON

- Built for any environment
- Industry-leading audio
- Ultra-rugged touchscreen
- Customizable experience
- Long battery life
- Redesigned antenna
- Intrinsically safe

CONNECTIVITY IS ON

- Dedicated PTT device
- Seamless Voice Handover
- Full network interoperability with
- WAVE PTX
- DMR (MOTOTRBO)
- Long Term Evolution (LTE)
- Wi-Fi
- CBRS (Nitro™)
- Bluetooth



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EXPAND AND CUSTOMIZE YOUR RADIO'S FUNCTIONALITY WITH BEST-IN-CLASS ACCESSORIES

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LOUD AND CLEAR, DESIGNED FOR COMFORT AND WEARABILITY

A range of wired and wireless audio accessories enable a tailored experience. Bluetooth 5.0 provides fast and secure wireless connectivity, while the sleek and compact GCAI-mini wired accessory port is designed for improved wearability.

The new covert surveillance earpieces are designed for comfort with a lighter weight, modern look and sleek profile. Like the MOTOTRBO Ion these new earpieces are HD voice ready. The speaker element has moved closer to the ear tube, reducing the audio travel length and preserving audio quality.

ENERGY

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MAXIMISE POWER FOR THE LONGEST SHIFTS

If the battery dies, it jeopardizes everything. Our slim, lightweight batteries provide a battery life that lasts a full shift – ensuring the MOTOTRBO Ion works when you need it.

A variety of flexible charging solutions enables you to charge one or up to six batteries simultaneously - so your radios are always ready for the next shift.

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SECURE, EASY ACCESS

Choose from plastic carry cases and belt clips, all designed for ease yet provide a secure access to the MOTOTRO ION radio when wearing it on the waist or hip - so your team can stay hands free and focused on the task ahead.

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DESIGNED FOR WEARABILITY

Motorola Solutions' redesigned antennas provide convenience without compromising performance. Shorter and compliant conforming to the user in mission critical environments.

1. Under typical modelled conditions.



AUDIO

LOUD AND CLEAR, DESIGNED FOR COMFORT

RM780 RSM

HEAR AND BE HEARD LIKE NEVER BEFORE

DETAILS

Your fleet needs to communicate without delay and it is essential that they can hear clearly 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. Besides, RM780 has a 3.5mm audio jack that supports the new receive only translucent tube earpiece, PMLN8120. 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.

KEY FEATURES

LOUDEST, CLEAREST SPEAKER
Innovative audio technology enables you to hear and be heard over crowd noise, machinery and blaring sirens. Motorola Solutions' Water and WindShielding™ technology ensures audio is loud and clear.

SLIM DESIGN
Designed for the MOTOTRBO Ion radio, 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.

EASY TO USE
Top 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.

WORK-WHEN-WET AND IP68 CERTIFIED
Rugged and dependable, the RM780 is ready for use in harsh of environments and weather. Enhanced water drainage and top quality materials ensure you get the best audio experience.

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

FLEXIBLE WEARING
Wear your RM780 RSM 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.



RM780 SPECIFICATIONS

GENERAL

Part Number	PMMN4128
Dimensions (RSM Head only)	77 x 58 x 25 mm (3 x 2.3 x 1 in)
Weight (Total Kit)	212 g (7.48 oz)
Clip	Low Profile 360° Rotating Clip
Color	Black
Power Source	Ion Radio
Secondary Accessory Interfaces	3.5 mm Non-threaded
Intrinsically Safe	Yes

MICROPHONE

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

CONTROLS

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

SPEAKER

Diameter	47 mm
Rated Output Level	102 dB phon
Distortion (THD)	< 15%
Max Power	3Wrms

CABLE

Length	304 mm (12 in) Coiled Length
Flex Life	100k Cycles Minimum
Pull Strength	18.14 kg (40 lbs) Minimum
Accessory Connector Case	Polycarbonate Black

ENVIRONMENTAL

Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-67°F to +185°F (-55°C to +85°C)
Humidity	90% - 95% Relative Humidity at +50°C for 8 hours
Mil Specs	MIL810G Method 506.5 (Rain), MIL810G Method 509.5 Procedure 1 (Salt Fog), MIL810G Method 510.5 Procedure 1 (Dust), MIL810G Method 514.6 Procedure 1 Category 24 (Vibration), MIL810G Method 514.6 Procedure 1 (Vibration)
ESD	IEC / EN 61000-4-2
IP Rating	IP68
Impact Grill	31.75 mm (1.25 in) Diameter Steel Ball Drop
Work-When-Wet	Yes

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)

SECONDARY AUDIO ACCESSORY

PMLN8120	Receive-Only Loud Audio with Translucent Tube

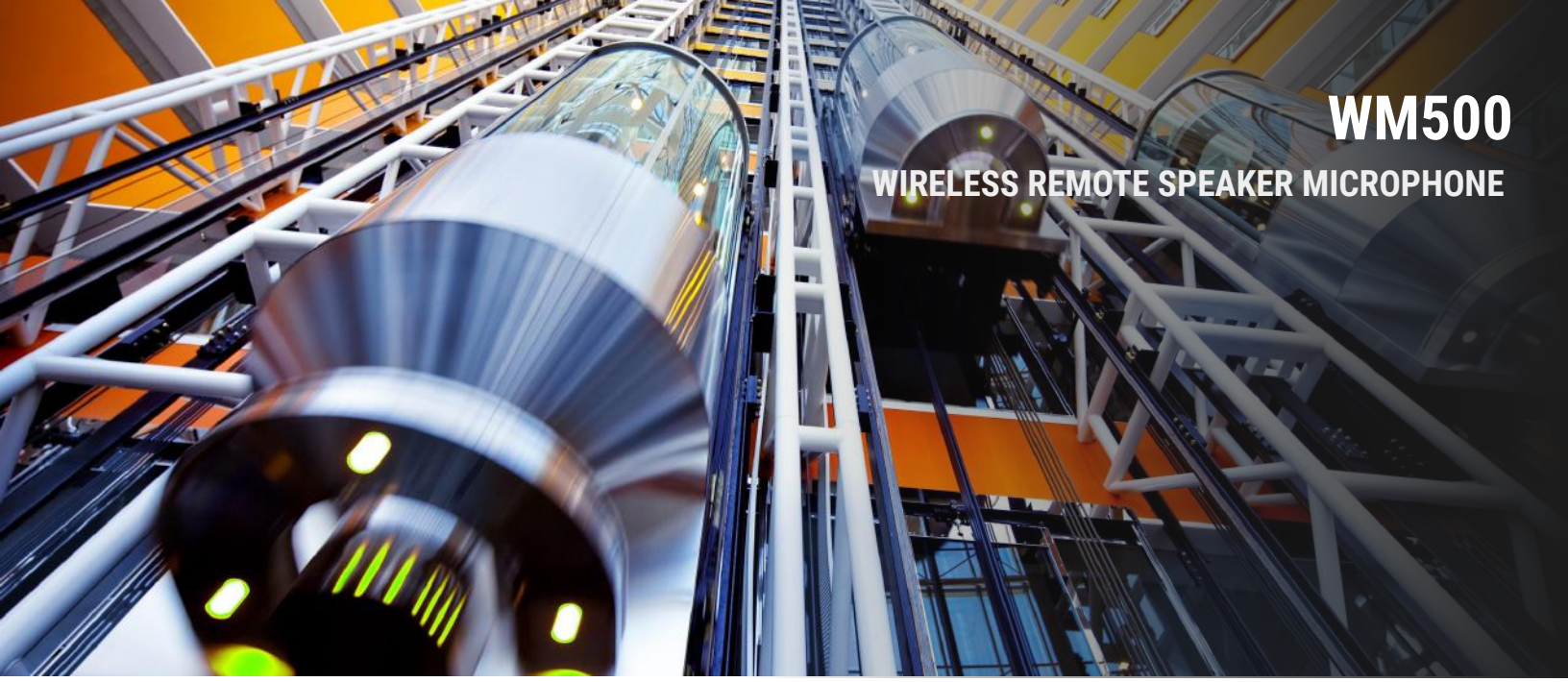
REPLACEMENT PARTS

PMLN8121	Low Profile Swivel Clip
PMLN8122	Dust Cover / 10 pcs per pack
PMKN4232	Coil Cord

BUTTON CONFIGURATION







WM500

WIRELESS REMOTE SPEAKER MICROPHONE

WHEN YOU'RE WORKING IN HIGHLY MOBILE, HANDS-ON INDUSTRIES, YOU NEED QUICK AND EASY ACCESS TO PTT APPLICATIONS ON YOUR MOTOTRBO ION.

The WM500[1] wireless remote speaker microphone is uniquely designed to give you the simplicity and security you need to perform your job efficiently and effectively. The WM500 is our thinnest wireless remote speaker microphone yet, and is built with an internal battery that lasts up to 40 hours so you can remain focused on the task at hand.

WindShielding™ technology allows you to communicate clearly in difficult weather by eliminating the whining and howling sounds of wind blowing across your remote speaker microphone. The result is clearer transmissions. A 3.5 mm earpiece jack (PMLN7560) provides you the flexibility to receive audio communications more effectively.

Designed for durability, this RSM is rated IP67 meaning it can withstand immersion for 30 minutes, while preventing water from clogging the microphone and is completely dust-tight.



Bluetooth™

KEY FEATURES

- Best-in-class audio quality and performance
- Discreet listening
- Rugged and waterproof

1. Minimum firmware R03 required.
2. Does not support WAVE on MOTOTRBO Ion.

EARPIECES AND HEADSETS

HEAR AND BE HEARD LIKE NEVER BEFORE

EARPIECES



IMPRES™ 1- Wire Surveillance Kit with Loud Audio Translucent Tube, GCAI-mini

With replaceable quick disconnect clear tube, inline PTT and microphone, loud audio supported, black, TIA compliance

PMLN8082



IMPRES™ 2 - Wire Surveillance Kit with Loud Audio Translucent Tube, GCAI-mini

With replaceable quick disconnect clear tube, inline PTT and microphone, loud audio supported, black, TIA compliance

PMLN8083



IMPRES™ 3 - Wire Surveillance Kit with Loud Audio Translucent Tube, GCAI-mini

With replaceable quick disconnect clear tube, inline PTT and microphone, loud audio supported, black, TIA compliance

PMLN8084



Rx Only, Loud Audio Translucent Tube

For use with RSM RM780 (PMMN4128), 3.5 mm jack, TIA compliance

PMLN8120



Rx Only, Translucent Tube

For use with WM500 RSM (PMMN4127), 3.5 mm jack, black, TIA compliance

PMLN7560



EP910W Operation Critical Wireless Earpiece w/ PTT

Volume up/down, functional button and noise cancellation, Bluetooth 4.2, minimum 8-hour battery talk time, Includes micro-USB cable for charging, earbud replacements available

PMLN8123

HEADSETS



Behind-the-Head Headset

With flexible boom microphone and PTT, noise reduction 24dB, TIA compliance

PMLN8085



Over-the-Head Headset

With flexible boom microphone and PTT, noise reduction 24dB, TIA compliance

PMLN8086





ENERGY

MAXIMIZE POWER, LIFE AND MANAGEMENT WITH IMPRES™ 2

IMPRES™ 2 BATTERIES

MAXIMIZE POWER, LIFE AND MANAGEMENT

You may run out of energy before your battery does! Powered by IMPRES™ 2 batteries augmented with energy management intelligence, MOTOTRBO ION extends your lifeline a full shift or beyond. When maintained with IMPRES 2 energy management solutions, the MOTOTRBO Ion battery delivers up to 60% more field life cycles than a standard Lithium Ion battery, backed with a 24-month capacity warranty[1] and an industry leading workmanship warranty[1] of four years. MOTOTRBO ION radio environmental specifications are achieved with all battery choices, providing extreme ruggedness meeting IP68 submersibility when you need it - without doubt.

SPECIFICATIONS

	Standard	Standard HazLoc[2]
Part Number	PMNN4803	PMNN4804
Capacity	2820 mAh	2900 mAh TIA4950 (UL)
Operating Temperature	-20C to +60ºC (-4ºF to +140 ºF)	-20C to +60ºC (-4ºF to +140 ºF)
IP Rating	IP68[3] MOTOTRBO Ion Portable Radio System Rating	
Availability	In-Box Order Option or Aftermarket	In-Box Order Option or Aftermarket



2820 mAh 2900 mAh

1. 24 month capacity warranty applicable only when battery is maintained with IMPRES 2 chargers.
2. HazLoc: listed by UL to standards ANSI/TIA 4950 and CAN/CSA C22.2 No. 157-92 as safe for use in Class I, Division 1, Groups C, D; Class II Group E, F, G; Class III and Class I, Division 2, Groups A, B, C, D Hazardous (Classified) Locations.
3. IP68: ION radio with battery attached submerged in 2 meters of water for 2 hours.

IMPRES™ 2 CHARGING SOLUTIONS

MOTOTRBO Ion IMPRES 2 charger technology is available in single unit (SUC) and multi-unit (MUC) charger configurations. Owners of a MOTOTRBO IMPRES 2 multi unit charger (PMPN4284) may convert one or more MOTOTRBO pockets with the field installable MOTOTRBO Ion adapter.

IMPRES 2 MULTI-UNIT CHARGER

Charge up to six MOTOTRBO Ion batteries or radios simultaneously for more efficiency.

- IMPRES 2 charging algorithms increase charge cycles up to 60% over non-IMPRES
- Displays enhanced diagnostics[1] for each pocket
- Disable calibration mode[2] or enable long term storage mode[3]
- Optional wall mount kit BR000272A01 available
- California Energy Commission (CEC) energy efficiency compliant



IMPRES 2 MULTI-UNIT CHARGER - 6 POCKET

IMPRES 2 SINGLE UNIT CHARGER

Charge your battery by itself or while it's attached to the radio.

- IMPRES 2 charging algorithms increase charge cycles up to 60% over non-IMPRES
- Ability to disable calibration mode via mode selection switch
- California Energy Commission (CEC) energy efficiency compliant
- Plug included in kit



IMPRES 2 SINGLE-UNIT CHARGER

MOTOTRBO ION ADAPTER for MOTOTRBO PMPN4284 MULTI-UNIT CHARGER

- End user field upgradeable
- Create MOTOTRBO Ion/ MOTOTRBO mixed device multi-unit charger



ION BATTERY ADAPTER FOR MOTOTRBO PMPN4284 MULTI-UNIT CHARGER

PART NUMBERS

	SINGLE UNIT	DIMENSIONS	WEIGHT	MULTI-UNIT	DIMENSIONS	WEIGHT
EU	PMPN4525	(3.46 x 3.7 x 2 in) 88 x 94 x 52 mm	4.05 oz (115 g)	PMPN4499	6.69 x 17.5 x 4.57 in (170 x 445 x 116 mm)	81.13 oz 2300 g
UK	PMPN4510			PMPN4516		
ANZ	PMPN4511			PMPN4517		
KOREA	PMPN4514			PMPN4520		
US/JAPAN	PMPN4524			PMPN4498		
BRAZIL	PMPN4515			PMPN4521		
ARGENTINA	PMPN4512			PMPN4518		

PRODUCT	PART NUMBER	DIMENSIONS	WEIGHT
Wall Mount Bracket for Multi-Unit Charger	BR000272A01	8.5 x 16 x 8.15 in (217 x 408 x 207mm)	65 oz (1840 g)
Ion Battery Adapter (only for use with PMPN4284 Multi-Unit Charger)	AS000180A01	3.86 x 8.6 x 2.6 in (98 x 218 x 66 mm)	7.23 oz (205 g)

[1] IMPRES 2 MUC display diagnostics: battery day 1 available capacity, current available capacity, rated capacity, part number, serial number, use cycles
[2] Motorola recommends a CALIBRATION procedure be performed on an IMPRES 2 battery every 28 days to maintain best MOTOTRBO Ion device fuel gauge accuracy
[3] Long Term Storage Mode keeps a battery in a selectable 50% or 75% state of charge.



CARRY
SECURE, EASY ACCESS

CARRY SOLUTIONS

SECURE, EASY ACCESS

Choose from plastic carry cases and belt clips, all designed for easy yet secure access to the MOTOTRBO Ion radio when wearing it on the waist or hip - so your team can stay hands free and focused on the task ahead.



CARRY CASE WITH 2.5in FIXED BELT CLIP
(RADIO SOLD SEPARATELY)

MOTOTRBO ION PLASTIC CARRY CASE

The lightweight, plastic carry cases simplify one handed device access without compromising device security so your hands are free and information is within reach. A quick connect 2.5 in fixed belt clip or swivel belt loop also allows you to easily disconnect and quickly retrieve your radio when needed. The swivel belt loops enable rotation of the radio to a comfortable position, while belt clips will hold your MOTOTRBO Ion securely on your waist.

KEY FEATURES

- Secure retention allows simple one hand device access
- Design protects MOTOTRBO Ion's touch screen by keeping it facing in on the belt
- Built-in audio ports enable you to leave your radio in the case for audio applications without degrading device transmit and receive performance
- Accommodates connection of all compatible audio accessories

PART NUMBER SPECIFICATIONS

MOTOTRBO Ion Plastic Carry Case with 2.5in Fixed-Angle Spring-Action Belt Clip	PMLN8126
MOTOTRBO Ion Plastic Carry Case with 2.5in Hard Leather Swivel Belt Loop	PMLN8127
2in Fixed-Angle Spring-Action Belt Clip	PMLN4651
2.5in Fixed-Angle Spring-Action Belt Clip	PMLN7008
2.5in Hard Leather Swivel Belt Loop	PMLN5407
3in Hard Leather Swivel Belt Loop	PMLN5409



CARRY CASE
WITH 2.5in SWIVEL BELT LOOP
(RADIO SOLD SEPARATELY)

ANTENNAS

DESIGNED FOR WEARABILITY



ANTENNAS

DESIGNED FOR WEARABILITY

DETAILS

Motorola Solutions' redesigned antennas provide convenience without compromising performance. Shorter and more compliant conforming to the user than other MOTOTRBO antennas, MOTOTRBO Ion antennas are comfortable to wear and easier to use without snagging on clothing.

SPECIFICATIONS

	Stubby	Stubby	Whip
Part Number	AN000350A01	AN000351A01	AN000348A01
Frequency Range	400-450 MHz	440-490 MHz	400-527 MHz,
Length	60 mm (2.36 in)	60 mm (2.36 in)	90 mm (3.54 in)

ANTENNA ACCESSORIES

ID BANDS	PART NUMBER
GREY	32012144001
YELLOW	32012144002
GREEN	32012144003
BLUE	32012144004
PURPLE	32012144005



Stubby Whip



Tecnitrān
TELECOMUNICACIONES

Tel. Madrid: 916 106 678 | Tel. Valencia: 960 699 593 | Tel. Mallorca: 871 620 033

www.tecnitran.es | info@tecnitran.es

Síguenos en:

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