Brochure EMEA

MOTOTRBO R7Ex

ATEX-certified portable radios

Work safer. Hear clearer. Perform better.

MOTOROLA SOLUTIONS

Be safe

ATEX Ratings

Gas protection:

II 2G Ex ib IIA T4 Gb / II 2G Ex ib IIC T4 Gb

II	Equipment group II: "other" environments (not mining areas susceptible to firedamp) where explosive atmospheres may be present, eg oil & gas operations, chemical production and manufacturing processes involving dust
2G	Gas, vapour and mist equipment category: high protection for use in Zone 1 (explosive atmosphere is likely to occur in normal operation) and Zone 2 (not likely to occur or if it does is only of short duration)
Ex	Explosion-proof equipment, certified to ATEX Directive and IECEx
ib	Protection type: intrinsic safety, limit potential ignition energy and surface temperature
IIA	Gas group: IIA (typical gas propane)
IIC	Gas group: IIC protection in the most explosive gas environment (typical gas hydrogen/acetylene)
T4	Temperature classification: device surface temperature will not exceed 135°C
Gb	Equipment protection level: flame retardant

Mining protection:

I M2 Ex ib I Mb

I	Equipment group I: mines and surface installations at risk of combustible dust or firedamp
M2	Equipment category M2, must be possible to switch off device if an explosive atmosphere occurs
Ex	Explosion-proof equipment, certified to ATEX Directive and IECEx
ib	Protection type: intrinsic safety, limit potential ignition energy and surface temperature
I	Explosion group: methane, coal dust
Mb	Equipment protection level: flame retardant

Dust protection:

II 2D Ex ib IIIC T130°C Db

II	Equipment group II: "other" environments
2D	Dust equipment category: high protection for use in Zone 21 (explosive atmosphere is likely to occur in normal operation) and Zone 22 (not likely to occur or if it does is only of short duration)
Ex	Explosion-proof equipment, certified to ATEX Directive and IECEx
ib	Protection type: intrinsic safety, limit potential ignition energy and surface temperature
IIIC	Dust group: protection in the most explosive dust environment (conductive)
T130°C	Temperature classification: device surface temperature will not exceed 130°C
Db	Equipment protection level: flame retardant

ATEX ingress protection:

ATEX IP rating (defined in IEC60079) requires more rigorous testing than standard IP rating (IEC60529) to ensure equipment is safe for use in potentially explosive environments. With ATEX IP testing, the equipment is first subjected to 28 days of thermal endurance tests followed by hot or cold ball impact before undergoing the IP testing. Standard IP testing does not subject the equipment to these stress conditions before carrying out the IP tests.

IP6x	Dust-tight, no ingress of dust
IPx6	Water resistant, protected against strong jets of water
IPx8	Waterproof, withstands immersion in water

MOTOTRBO R7Ex

MOTOTRBO R7Ex ATEX and IECEx certified portable radios provide high quality communications so teams can work more safely in potentially explosive environments.

With loud, clear audio plus a range of advanced features, R7Ex helps workers hear calls and share messages more clearly, boosting performance, increasing productivity and reducing downtime.

Work safer

MOTOTRBO R7Ex is intrinsically safe for use in potentially explosive environments and helps users collaborate to work more safely.

Intrinsically safe certified

When workers operate in potentially explosive environments like oil and gas operations, chemical production and manufacturing processes, incidents can be costly or even life threatening. Those workers need equipment they can trust to operate safely. MOTOTRBO R7Ex is ATEX and IECEx certified for use in areas where flammable gases, vapours, mist and dust may be present, and its prominent blue colouring makes it easy to identify radios that are safe to use. R7Ex will even warn the user if a non-ATEX battery has been fitted, helping prevent potential fire risks.

Protecting personnel

Protecting personnel is paramount, and MOTOTRBO R7Ex can help workers communicate effectively to boost collaboration and work more safely. A dedicated, easy-to-reach emergency button allows users to quickly notify others of problems, and Lone Worker and Fall Alert features can automatically call for help when the user is incapacitated. R7Ex features built-in GNSS and Bluetooth that can help quickly locate workers inside or outdoors in case of emergency..

Built for harsh environments

R7Ex is built to work in demanding conditions, with intuitive controls and status indications that make it easy to use even when wearing heavy workgloves. It is IP66 and IP68 dust-tight and waterproof, so can withstand damage from dust, powerful water jets and even being fully submerged in water. R7Ex's wide operating temperature range, disinfectant resistant materials[1] and MIL STD 810 rating help ensure it can withstand the extreme conditions, knocks and drops encountered in hazardous locations.

[1] Please refer to the MOTOTRBO R7Ex user manual for a list of approved disinfectants and decontamination substances.

Hear clearer

R7Ex uses advanced audio processing and speaker design so messages can get through louder and clearer.

Clear

Workers operating in noisy and pressured environments need to be able to communicate effectively to stay safe and productive. R7Ex allows rapid communication between individuals and groups at the push of a button, with advanced AI-trained noise cancellation to reduce background noise, and a low distortion speaker that delivers clear quality audio.

Loud

Large machinery, plant equipment and heavy vehicles can all create high noise levels. From pumps and fans, to drills and crushers or compressors, generators and more, the background clamour in potentially explosive environments makes it difficult for workers to hear. R7Ex features a powerful 2.5W speaker and dual click volume knob with Volume Boost that can deliver loud audio up to 108 phons, plus a range of ATEX-certified headsets is available that provide hearing defence while allowing workers to hear messages on their R7Ex.

Controlled

R7Ex is designed to optimise audio performance across a wide range of workplace environments and worker profiles so users don't need to constantly adjust the radio volume or settings. IMPRES™ technology, Automatic Gain Control and Received Audio Levelling smooth out the differences in users' voice levels and microphone placement. Intelligent Audio automatically adjusts the radio output based on background noise levels to avoid blaring messages or missed calls, and automatic acoustic feedback suppression prevents feedback between devices when users' radios are close together.

Perform better

R7Ex helps users perform better, enabling multiple ways to communicate more effectively to minimise downtime, boost performance and increase productivity.

Maximise uptime

Whether working in drilling and mining, manufacturing and processing, or storage and distribution, every second of downtime is costly for modern operations. R7Ex provides secure, reliable push-to-talk communications that can help maximise uptime by preventing accidents, equipment breakdown and operator error, and can speed up resolutions if incidents do occur. With wide area coverage and R7Ex's built-in voice recording and playback, workers never need to miss a call.

Easy to use and manage

Intuitive controls make R7Ex easy to use with minimal training, and its long battery runtime can last a shift without recharging. R7Ex has rotary knobs and large PTT and emergency buttons that are simple to operate, even when wearing heavy workgloves, and programmable buttons provide single press short-cuts to the most commonly used features. Radio management has also been made easier for system admins, with over-the-air programming through DMR or Wi-Fi to update radios without the need to withdraw them from service in the field.

Work smarter

Integrate R7Ex into your workflows and processes to enhance worker productivity and safety. Its text messaging is ideal for noisy environments, when detailed information such as equipment serial numbers is being shared, or information needs to be retained for later use, and text-to-speech will read out text messages, allowing the user to keep their attention on their task. R7Ex has an internal clock and so can display the time, allowing workers to keep track of progress, and NFC or RFID tags can be added to the radio for asset allocation and management. Built-in Bluetooth allows wireless connection to audio accessories or sensors, or can be used to monitor worker location to help improve safety and provide an audit trail to show process compliance.

Enhance performance with accessories

Customise your MOTOTRBO R7Ex to your work environment with Motorola Solutions accessories. These are designed and tested with our radios to provide optimal performance and to meet ATEX requirements as a complete system. Choose from a selection of audio accessories, batteries, chargers and carry cases.

Audio

Clear, comfortable and convenient

Fine-tune your experience with an audio accessory designed to complement the R7Ex's performance. Select from a range of accessories including remote speaker microphones and headsets.

Energy

Powerful and long-lasting

You need a battery that's as powerful as your radio. Our long-lasting, swappable batteries last a full shift, ensuring the MOTOTRBO R7Ex works when you need it. A variety of flexible charging solutions enables you to charge between one and six batteries simultaneously, so your radios are always ready for the next shift.

Carry

Secure, easy access

Our range of carry cases, straps and clips allows users to work handsfree by safely securing R7Ex to their waist, hip or chest, and ensures the radio is easily to hand when needed.

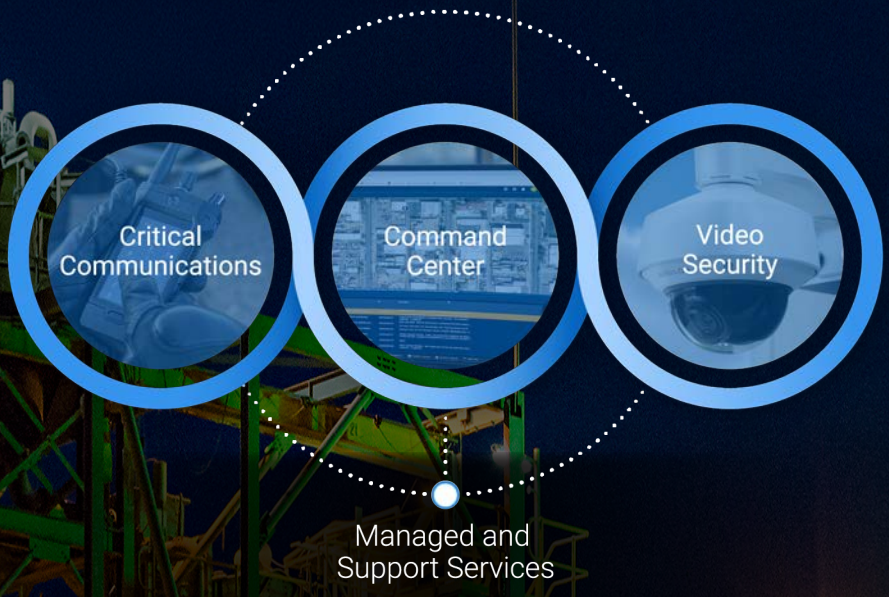
Protect your investment

MOTOTRBO R7Ex is built to last, and is supplied as standard with an enhanced warranty including 2 year cover for manufacturing defects and 5 years of access to software updates to help keep the devices current. For even greater peace of mind, optional service packages are available to provide enhanced or extended cover.

MOTOTRBO R7Ex within the Motorola Solutions safety and security ecosystem

Our ecosystem supports the collaboration needed between public safety and enterprises to help protect people, property and places. Because people and technology are stronger when united. Voice, video and data are unified, so information flows, operations run and collaboration improves. Individually, our products help make the world safer. United, they're exponentially more powerful.

MOTOTRBO R7Ex is built into this ecosystem so you can get more out of your communications investment. Keep your teams aware and streamline critical communications by receiving automatic notifications from your video security and access control systems, sensors and more directly on your device. Control and consolidate instant voice communications from your desktop using innovative computer-aided dispatch solutions. And extend communications beyond your radio network with interoperability with flexible broadband push-to-talk solutions.



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These models available in Motorola Solutions EMEA region only. Availability varies and 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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