

MOTOTRBO™ DP1400 PORTABLE RADIO

YOU'RE SIMPLY MORE EFFICIENT



You want to connect your workforce as efficiently as possible. You expect your radios to be affordable but flexible, so they can evolve with you. Now there's a portable that gives you great voice communications today, and a path to crisp and clear digital voice communications when you're ready.

Versatile and powerful, MOTOTRBO™ combines the best of two-way radio functionality with the latest analogue and digital technology. The MOTOTRBO portfolio offers the right device for the right user, from voice-only portables to feature-rich voice and data radios.

The rugged MOTOTRBO DP1400 is available as an analogue/digital radio that offers all the benefits of the latest technology – from superior audio to greater coverage to longer battery life. This affordable portable is compatible with advanced MOTOTRBO features you'll find are business-essential, for example a transmission can be interrupted to prioritise critical communications.

You can also choose the analogue-only DP1400 radio and unlock the capabilities of digital when the time is right: all you will need is a simple software upgrade. And whichever model you choose, the DP1400 will work seamlessly with the radios you have today.

Now you can improve the efficiency of your operation with easy-to-use voice communication that's right for you.

FEATURES

- Analogue / Digital
- Voice Communications
- Dual Capacity Direct Mode¹
- Digital Mobile Radio (DMR) Standards Compliant¹
- Transmit Interrupt (Decode Only)¹
- Basic Privacy¹
- Voice Announcement
- IP54 Rated
- Radio Management Suite Compatible

SIMPLE VOICE COMMUNICATIONS
FOR THE EVERYDAY USER WHO WANTS TO STAY CONNECTED

PRODUCT SPEC SHEET

MOTOTRBO™ DP1400 PORTABLE RADIOS

CONNECT AND COORDINATE CREWS

When you need a simple, reliable, cost-effective communication solution to help multiple work crews connect, coordinate and collaborate, DP1400 two-way portable radios are made to get the job done right. With their easy-to-use ergonomics and crisp, clear audio, now your teams can work more efficiently.

Unleash the power of your DP1400 radios with Motorola Original® accessories. They're the only accessories designed, built and tested with your radio to optimise its performance – see the separate DP1400 accessory fact sheet for the full portfolio.

IMPROVE THE WAY THEY WORK

A construction worker carries his DP1400 as an essential part of his toolkit. The digital technology gives him excellent coverage across the entire site. And it has significantly better battery life too, so he knows he'll have reliable voice communications all day long.

The manufacturing team in a parts factory relies on DP1400 portables to coordinate operations. The radio's digital noise-cancelling software filters out the worst of the background noise, allowing them to hear clearly over loud machinery. Factory capacity is expanding, so they're running MOTOTRBO Dual Capacity Direct Mode, which can fit twice as many calls into the same spectrum.

A security guard uses his DP1400 to alert the control room to some suspicious activity. The radio's intuitive design is easy to use in the dark, and even when he speaks softly, he knows that the digital AGC (Automatic Gain Control) will automatically boost the volume so he's heard clearly back in the office. And if it comes to the worst, he can use one of the programmable side buttons to call for help – with one touch.

MANAGE YOUR FLEET MORE EFFICIENTLY

We've designed the DP1400 to be as efficient to operate as it is cost-effective to buy. That's why we've integrated the powerful fleet management capabilities of Motorola's Radio Management solution into every radio.

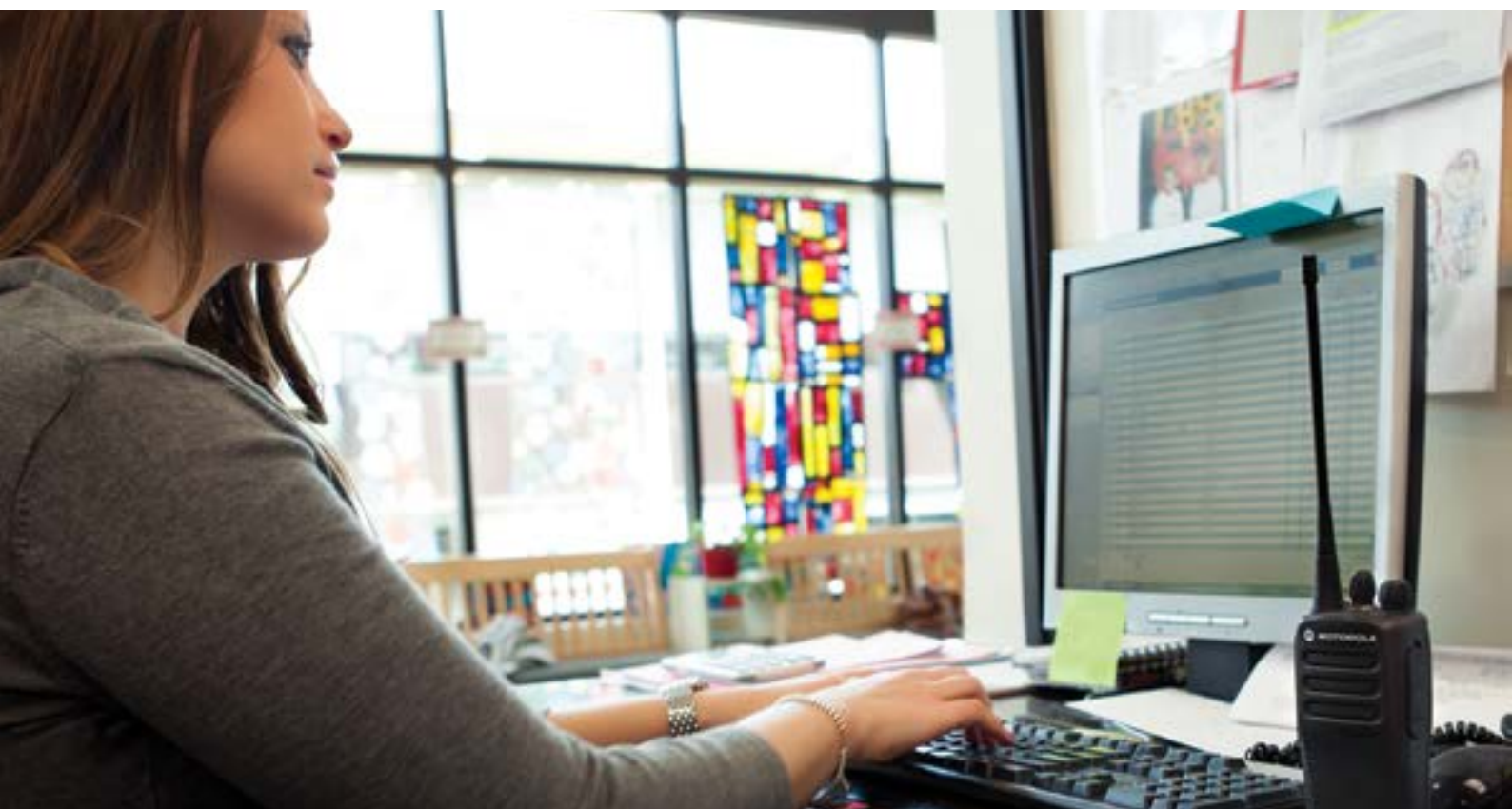
Gain even greater efficiency when you migrate to digital. Your radio will operate up to 40% longer than analogue on the same battery – and you get twice the capacity from the same 12.5 kHz channel, using our Dual Capacity Direct Mode feature.

INTEGRATE YOUR DEVICES SEAMLESSLY

Make sure your new DP1400 radios are ready when you are. We can bring together the right experts and processes to help you integrate DP1400 radios into your business, quickly and cost-effectively. This includes Coverage Mapping, Site Integration and Device Programming.

GET DURABILITY THAT ENDURES

The DP1400 is made to last. It is backed by a two-year standard warranty and a minimum one-year warranty for Motorola-branded accessories. Moreover, the design has been proven tough in Motorola's unique and gruelling Accelerated Life Test program, in which the radio must survive a simulated 5 years of hard service before it is accepted. In addition, optional Service from the Start provides multi-year peace of mind with fast repair turnaround times, expert telephone technical support and access to the latest software releases²; all backed by Motorola's globally integrated services infrastructure, highly qualified support technicians and certified repair facilities.



PRODUCT SPEC SHEET
MOTOTRBO™ DP1400 PORTABLE RADIOS

GENERAL SPECIFICATIONS		
	DP1400	
	VHF	UHF BAND 1
Channel Capacity	16	
Typical RF Output		
Low Power	1 W	1 W
High Power	5 W	4 W
Frequency	136-174 MHz	403-470 MHz
Radio Dimensions (H x W x D) with battery:		
NiMH 1400mAh	5.0 x 2.4 x 1.7 in (127.7 x 61.5 x 42.0 mm)	
Slim Li-Ion 1600mAh	5.0 x 2.4 x 1.5 in (127.7 x 61.5 x 39.0 mm)	
Li-Ion 2200mAh	5.0 x 2.4 x 1.8 in (127.7 x 61.5 x 44.0 mm)	
Weight with battery:		
NiMH 1400mAh	14.3 oz (406 g)	
Slim Li-Ion 1600mAh	12.1 oz (341 g)	
Li-Ion 2200mAh	12.2 oz (346 g)	
Power Supply	7.5V (Nominal)	
BATTERY		
Average battery life at 5/5,90 duty cycle with carrier squelch and transmitter in high power. ³		
NiMH (1400 mAh) Battery	Analogue: 9 hrs / Digital: 11.5 hrs	
Li-Ion Slim (1600 mAh) Battery	Analogue: 10.5 hrs / Digital: 13.5 hrs	
High Cap Li-Ion (2200 mAh) Battery	Analogue: 14.5 hrs / Digital: 18.5 hrs	
RECEIVER		
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Analogue Sensitivity (12 dB SINAD)	0.3 µV / 0.22 µV (typical)	
Digital Sensitivity (5% BER)	0.25 µV / 0.19 µV (typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603D)	45 dB @ 12.5 kHz / 70 dB @ 20/25 kHz	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5 W (Internal)	
Audio Distortion @ Rated Audio	5% (3% typical)	
Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 20/25 kHz	
Audio Response	TIA603D	
Conducted Spurious Emissions (TIA603D)	-57 dBm	
TRANSMITTER		
Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Low Power Output	1 W	1 W
High Power Output	5 W	4 W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz / ± 4.0 kHz @ 20 kHz / ± 5.0 kHz @ 25 kHz	
FM Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 20/25 kHz	
Conducted / Radiated Emission	-36 dBm < 1 GHz / -30 dBm > 1 GHz	
Adjacent Channel Power	60 dB @ 12.5 kHz / 70 dB @ 20/25 kHz	
Audio Response	TIA603D	
Audio Distortion	3% (typical)	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1W	
Digital Vocoder Type	AMBE +2™	
Digital Protocol	ETSI TS 102 361-1, -2, -3	

Specifications subject to change without notice. All specifications shown are typical.



PRODUCT SPEC SHEET
MOTOTRBO™ DP1400 PORTABLE RADIOS

MILITARY STANDARDS

Applicable MIL-STD	810C		810D		810E		810F		810G	
	Method	Procedures	Method	Procedures	Method	Procedures	Method	Procedures	Method	Procedures
Low Pressure	500.1	I	500.2	II	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/Hot	501.5	I-A1, II
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
Temperature Shock	503.1	–	503.2	I/A1/C3	503.3	I/A1/C3	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	–	507.5	II - Aggravated
Salt fog	509.1	–	509.2	–	509.3	–	509.4	–	509.5	–
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	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-cat.24
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, V, VI

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C / +60°C
Storage Temperature	-40°C / +85°C
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
ESD	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IEC60529 - IP54
Packaging Test	Per MIL-STD

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All specifications shown are typical unless otherwise stated.

¹ Features only available in Digital mode.

² Software release covers patches and maintenance releases of the current version to the operating system i.e. that shipped with the terminal.

³ Actual battery runtime observed may vary.

⁴ Radio only - Li-Ion battery -10°C.



For more information on the MOTOTRBO™ DP1400, visit motorolasolutions.com/mototrbo or find your closest Motorola representative or authorised Partner at motorolasolutions.com/contactus

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MOTOTRBO DP1400 ACCESSORIES



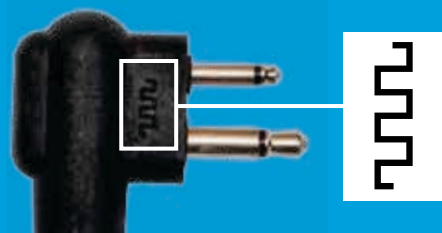
FREE YOURSELF TO WORK MORE EFFICIENTLY

No matter where you go or what you do, MOTOTRBO™ is made for clear, coordinated communication in the busy workplace. To help you excel in your job, you need accessories that match the performance of your MOTOTRBO radio and that truly fit your environment. That's why it's important to use Motorola tested and certified accessories with your DP1400 portable radio. They're the only ones designed, built and tested with your radio to optimise its performance.

Only Motorola accessories unleash the full power of MOTOTRBO – the most advanced digital radio platform in the industry. So as you walk along the production line, across hotel grounds, or to the store stockroom, you can work more easily and efficiently wearing a comfortable, convenient accessory. Combine our best-in-class radios with DP1400 accessories to achieve even greater productivity and cost-savings. **Together, you'll rethink what's an accessory – and what's a necessity.**

OPTIMISED FOR DIGITAL

Make sure to only use Motorola audio accessories with this digital symbol, which indicates that these accessories have been optimised for performance in both digital and analogue mode. All accessories with this symbol have been certified and approved for DP1400 portable radios.



EARPIECES, SURVEILLANCE ACCESSORIES AND RSMs

A wide selection of styles fit the way you work – from discreet clear acoustic tube styles to over-the-ear models. With inline push-to-talk and microphones, these accessories are easy to access on the go, so you can stay focused on the job. Choose from a variety of surveillance kits and ear microphones to communicate discreetly.

KEEP THEM FOCUSED ON THE GO



PMMN4013



PMLN6535

EARPIECES

PMLN6533	Earset with combined microphone and PTT
PMLN6535	D-Style Earpiece with microphone and push-to-talk
BDN6720	Flexible Ear Receiver (Receive Only)
PMLN6532	Mag One Swivel Earpiece with inline microphone and push-to-talk
PMLN6534	Mag One Earbud with inline microphone, push-to-talk and VOX switch
PMLN6531	Mag One Ear Receiver with inline microphone, push-to-talk and VOX switch
PMLN6537	Mag One Earset with boom microphone and inline push-to-talk and VOX switch
7580372E11	Replacement Foam Ear Cushion (for BDN6720A)

SURVEILLANCE ACCESSORIES

Surveillance Kits

PMLN6530	2-Wire Surveillance Kit with translucent tube, black
PMLN6445	2-Wire Surveillance Kit with translucent tube, beige

Surveillance Accessories and Replacement Parts

RLN4760 / RLN4763	Small Clear, Comfortable Earpiece (right/left ear)
RLN4761 / RLN4764	Medium Clear, Comfortable Earpiece (right/left ear)
RLN4762 / RLN4765	Large Clear, Comfortable Earpiece (right/left ear)

5080370E97	Replacement standard clear rubber eartip for RLN6242, pack of 25
RLN6242	Replacement quick disconnect translucent tube with 1 clear rubber eartip (for PMLN6530/PMLN6445)

REMOTE SPEAKER MICROPHONES

PMMN4029	Windporting Remote Speaker Microphone, submersible (IP57)
PMMN4013	Windporting Remote Speaker Microphone with 3.5mm audio jack (IP54)
PMMN4092	Mag One Remote Speaker Microphone

REMOTE SPEAKER MICROPHONES ACCESSORIES

MDRLN4885	Receive-Only Covered Earbud with coiled cord
MDRLN4941	Receive-Only Earpiece with translucent tube and rubber eartip
WADN4190	Receive-Only Flexible Earpiece
PMLN4620	Receive-Only D-shell Earpiece

TEMPLE TRANSDUCERS

Temple Transducers provide clear audio without covering your ears. Because they rest comfortably on your temples, they make it easy to communicate and wear hearing protection or keep your ears uncovered to hear what is going on around you.

HEAR ONLY WHAT YOU NEED TO



PMLN6541

TEMPLE TRANSDUCER

PMLN6541	Lightweight Temple Transducer Headset with inline microphone and push-to-talk
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HEADSETS

Our lightweight headsets provide lasting comfort and our heavy-duty headsets provide comfortable ways to protect your hearing in noisy environments. Even if your teams are logging extra hours stocking shelves or clocking overtime on the manufacturing line, they can communicate confidently. Heavyweight headsets offer extra durability and protection in more rugged and noisy environments.

HEADSETS

PMLN6538	Lightweight Headset, over-the-head, single muff with swivel boom microphone
PMLN6542	Mag One Ultra-Lite Headset, behind-the-head, adjustable with boom microphone and inline push-to-talk
PMLN6539	Medium weight over-the-head dual muff headset with swivel noise cancelling boom microphone
PMLN6540	Heavy-Duty Headset, behind-the-head dual muff (hardhat compatible) with noise cancelling boom microphone, inline push-to-talk and 24dB noise reduction
REX4648	Replacement Foam Windscreen and Ear Pad (for PMLN6538)

COMFORT AROUND THE CLOCK



HEAVY-DUTY HEADSET REPLACEMENT PARTS

PMLN6540	75012068001 – Foam Ear Seal	6775998M01 – Microphone O-Ring
	15012094001 – Cloth Covers	3578010A01 – Headset Windscreen
	4204004K01 – Over the Head Strap	7575999M01 – Eyeglass Pad
PMLN6539	75012068001 – Foam Ear Seal	5080548E02 – Headset Windscreen
	15012094001 – Cloth Covers	3280376E35 – Microphone O-Ring

MAG ONE

When you need a cost-effective solution for light-duty users, trust Mag One, the only value line tested and certified by Motorola. They extend the value of your radios without breaking your budget and are ideal for hospitality, security and retail teams.

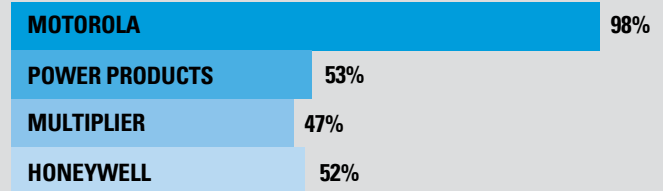
VALUE MEETS VERSATILITY



BATTERIES AND CHARGERS

As an added plus, you can re-use all of your batteries and chargers from your existing Commercial Series portable radios. Since MOTOTRBO batteries are Proven Tough, they stay true and stand tougher than others. In test after test in the lab, our batteries withstand shocks, knocks, drops and shakes and outperform the other brands. Choose from a variety of chargers, including a rapid-rate, multi-unit charger that handles up to six batteries at one time.

PROVEN TOUGH BATTERY TESTING PASS RATE



See motorolasolutions.com/emea/proventough for details.

BATTERIES

PMNN4251	NiMH 1400 mAh battery (CE)
PMNN4253	Slim Li-Ion 1600 mAh battery (CE)
PMMN4254	High Capacity Li-Ion 2300 mAh battery (CE)
NNTN4851	NiMH 1400 mAh battery
NNTN4970	Slim Li-Ion 1600 mAh battery
NNTN4497	High Capacity Li-Ion 2250 mAh battery

SINGLE-UNIT AND MULTI-UNIT CHARGERS

NNTN8351	Multi-Unit Charger 220V with UK Plug
NNTN8352	Multi-Unit Charger 220V with Euro Plug
PMLN5191	Single Unit Charger, SMPS UK Plug CE
PMLN5192	Single Unit Charger, SMPS Euro Plug CE
PMLN5193	Single Unit Charger, SMPS USA Plug CE

FACT SHEET

MOTOTRBO DP1400 ACCESSORIES

CARRY SOLUTIONS

You'll be amazed at how much time you'll save when your radio is always in the same place. Our versatile portfolio includes leather and nylon carry cases to protect your radio in tough places, while ensuring it's easy to find and use.

EASY PROTECTION THAT'S EASY TO LOCATE



CARRY ACCESSORIES

RLN5383	Hard Leather Case with 3" Fixed Belt Loop and D-rings
RLN5384	Hard Leather Case with 2.5" Swivel Belt Loop and D-rings
RLN5385	Hard Leather Case with 3" Swivel Belt Loop and D-rings
HLN9701	Nylon Case with 3" Fixed Belt Loop and D-rings
RLN5644	2" Belt clip
HLN8255	3" Belt clip
4280483B03	Replacement 2.5" Swivel Belt Loop
4280483B04	Replacement 3" Swivel Belt Loop
HLN6602	Universal Chest Pack
NTN5243	Adjustable Nylon Carrying Strap (attaches to d-rings)
RLN4570	Break-a-way Chest Pack
RLN4815	Radio Pack Radio Utility Case
HLN9985	Waterproof Bag
RLN5500	Retainer Kit, provides additional protection when securing accessories to radio
TDN9327	Radio Hanger for door panels up to 2.75 inches
TDN9373	Door Hanger for Radio and door panels 2.75 to 3.25 inches

PROGRAMMING AND TEST CABLES

PMKN4128	Portable Programming USB Cable
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ANTENNAS

UHF Antennas

PMAE4016	UHF Wideband Whip Antenna (403-520 MHz), 17 cm
PMAE4002	UHF Stubby Antenna (403-433 MHz), 9 cm
PMAE4003	UHF Stubby Antenna (430-470 MHz), 9 cm

VHF Antennas

NAD6502	VHF Heliflex Antenna (146-174 MHz), 15 cm
PMAD4012	VHF Stubby Antenna (136-155 MHz), 9 cm
HAD9742	VHF Stubby Antenna (146-162 MHz), 9 cm
HAD9743	VHF Stubby Antenna (162-174 MHz), 9 cm

For more information on the MOTOTRBO DP1400 accessories, visit motorolasolutions.com/mototrbo or find your closest Motorola representative or authorised Partner at motorolasolutions.com/contactus

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