

Danimex Communication

An award-winning distributor of radio communication solutions and equipment throughout the world.

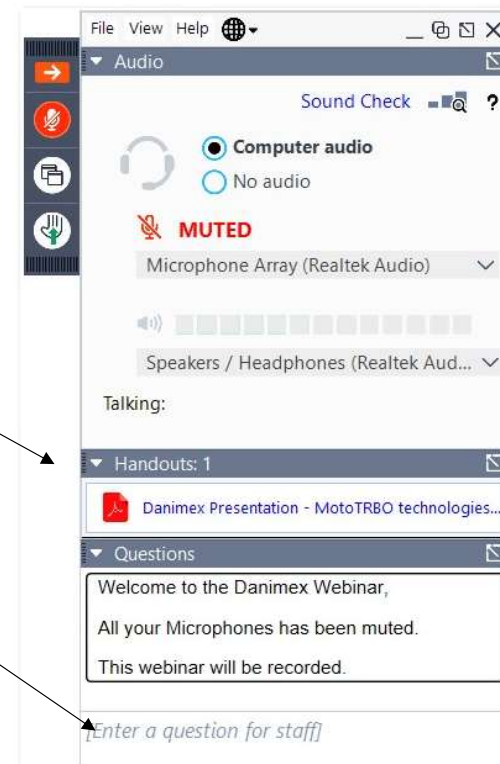
MotoTRBO Products



Danimex Academy 2020

Webinar Information

- You have all been muted.
- Possible downloads are here
- You can ask a question in the field for Q&A
- This webinar is being recorded for evaluation and also for later streaming



Your presenter today

- Johnni Bundgaard

- jbu@danimex.com



About Danimex

- Danimex has over 30 years' experience within the communication industry.
- We specialize in two-way radio solutions, supporting our partners with everything they need to build a complete ready-to-use communication system.
- Our vision is a world that empowers people to communicate without limits.



MOTOROLA SOLUTIONS EXTENSIVE PORTFOLIO



PMR446

DMR

TETRA

DMR: STANDARDS BASED, FUTURE READY SOLUTIONS

GLOBALY RECOGNIZED ETSI DIGITAL MOBILE RADIO (DMR) STANDARD

- Widely backed by industry leading radio manufacturers
- Most widely deployed digital two-way radio technology for professional users globally
- Open standard assures long-term viability
 - Tier I: low power, license-free 446MHz band
 - Tier II: licensed conventional high-power communications
 - Tier III: trunking operation



ETSI DMR STANDARD:

TR 102 398 V1.3.1 (2013-01)	General System Design
TS 102 361-1 V2.5.1 (2017-10)	Part 1: DMR Air Interface (AI) protocol
TS 102 361-2 V2.4.1 (2017-10)	Part 2: DMR voice and generic services
TS 102 361-3 V1.3.1 (2017-10)	Part 3: DMR data protocol
TS 102 361-4 V1.9.1 (2017-10)	Part 4: DMR trunking protocol

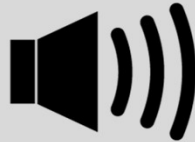
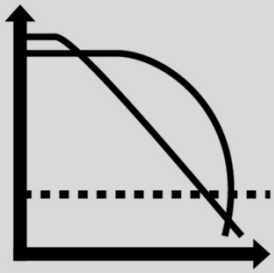
INTRODUCING MOTOTRBO

- A comprehensive digital two-way radio solution for professional and commercial communications
- Supports voice, data, text, GNSS, telemetry and apps
- Instantaneous, private and secure communications for the whole organization
- Built on the ETSI DMR standard
- Supports analogue and digital modes of operation





INTRODUCING MOTOTRBO



RANGE

AUDIO

CAPACITY

TALK-TIME

FEATURES

APPS

Intelligible speech over a larger area

Crisp and clear, even in fringe coverage areas

Twice the calling capacity of analogue radio in the same RF channel

Up to 40% longer battery life than analogue radio

Increased opportunity for innovation

Integration with workplace applications

MOTOTRBO EVOLUTION



DMR Full Standard Published

First MOTOTRBO Shipments

Second Generation Devices

Third Generation Devices

IP Site Connect

Capacity Plus

Linked Capacity Plus

ATEX Devices

S&S Control Room Solutions

Broadband PTT

Next Gen Repeater

Capacity Max

Portfolio Expansion

Feature additions and enhancements

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

DP3000
DM3000
DR3000

SL4000, DP4000
DM4000, DP2000
MPT Option Board

DP4000 Ex

DP3441, DP1000
DM1000, DM2000

SLR 5500

SL1600

MOTOTRBO
Anywhere

SmartPTT PLUS,
TRBOnet PLUS

SLR 8000

DP4000 Ex Ma

SL4000e, DP4000e
DM4000e, DP2000e,
DP3441e

SLR 1000

DP3661e, SL2600



THE MOTOTRBO PORTFOLIO



SYSTEMS		SUBSCRIBER RADIOS		ACCESSORIES									
CAPACITY MAX			ATEX			AUDIO		WIRELESS		ENERGY			
	CAPACITY PLUS				HIGH TIER		CARRY		MOBILE		ANTENNAS		
IP SITE CONNECT				MID TIER			APPLICATIONS	VOICE DISPATCH		LOCATION SERVICES		SERVICES	PLAN
	CONVENTIONAL				ENTRY TIER			COMMAND & CONTROL		WORK ORDER MGT			DEPLOY
							SYSTEM MONITORING		INTEROP SOLUTIONS		WAVE		
						TEXT & EMAIL		SAFETY		5000			



MOTOTRBO DURABILITY

- MOTOTRBO radios and accessories are designed to keep operating in extreme conditions
- Every design must pass Motorola Accelerated Lifetime Testing (ALT)
 - Simulates 5 years of hard use
 - Anticipates 15 year design life
- Radios are designed to withstand
 - Drops: Multiple 122 cm drops on all sides onto concrete
 - Low temperatures: Operation down to -20°C
 - Thermal shocks: Multiple cycles from -57°C to +80°C
 - Impacts: Multiple 115 g objects dropped from 1m
 - Water: Jets of water from all directions for 30 mins
 - Dust: 28 hours of fine blown dust
 - Cable strains: Multiple 1 minute, 18 kg pulls on accessory cables
 - Electric shocks: Up to 15 kV discharges
- Tightly sealed against dust and moisture





MOTOTRBO DEVICES PORTFOLIO

ENTRY TIER



DP1400 SL1600

MID TIER



DP2400e DP2600e SL2600

HIGH TIER



DP4400e DP4600e DP4800e DP3441e DP3661e SL4000e
DP4401e DP4601e DP4801e SL4010e

ATEX



DP4401Ex DP4801Ex



DM1400



DM1600



DM2600



DM4600e
DM4601e



DM4400e
DM4401e



DP4000 Handheld
Control Head



DP4401Ex Ma DP4801Ex Ma

VOICE

VOICE,
BASIC SYSTEMS

SUPERB VOICE, ENHANCED DATA,
SYSTEMS, APPS, FEATURES

POTENTIALLY EXPLOSIVE
ENVIRONMENTS



MOTOTRBO DP1400

Danimex™
WHEN YOU NEED TO TALK

RUGGED AND SIMPLE FOR THE EVERYDAY USER WHO NEEDS TO STAY CONNECTED

- Simple voice-only portable radio
- Analogue only or dual analogue/digital models available
- Tough, rugged, dependable
- Easy migration path from analogue radio
- High-efficiency features
- Compatible with MOTOTRBO feature-set



DIRECT MODE



CONVENTIONAL



IP SITE CONNECT



CAPACITY PLUS



CAPACITY MAX



YOU'RE SIMPLY MORE EFFICIENT



MOTOTRBO SL1600

Danimex™
WHEN YOU NEED TO TALK

SLIM AND PORTABLE FOR THE CUSTOMER SERVICE USER WHO WANTS INTUITIVE TECHNOLOGY

- Slim, lightweight voice-only radio
- Elegant ergonomics for easy use
- Rugged and reliable
- Advanced technology for high performance
- “Active View” display
- Award-winning design



- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX

YOU'RE SHARPER, CONNECTED



SL1600 DETAILS

SPECIFICATIONS

- **Dimensions:**
 - 126 X 55 X 22 mm
 - 169g (VHF) 166g (UHF)
- **Bands**
 - VHF (136-174 MHz)
 - UHF (403-470 MHz)
- **Transmitter Power**
 - 1 or 2W (Analogue)
 - 1 or 3W (Digital)
- **Capacity:**
 - 99 Channels
- **Battery Life (analogue/digital)**
 - 11.8 / 14.0 hours
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 1 Programmable Button scrolls up to 7 Features





SL1600 ACTIVE VIEW DISPLAY



Channel
Alias

Channel
Alias
Scrolling

Channel
Number

Volume
Level

Battery
Charged



Tones On

Tones Off

Display
Brightness

Voice
Announcement
On

Power Level
High

AN INNOVATIVE WAY TO COMMUNICATE IMPORTANT RADIO INFORMATION

CRISP AND CLEAR

- LED matrix: No glare or reflections
- Displays important information in large characters
- Longer messages scroll across screen

DURABLE

- LEDs are protected by radio casing
- Display is unaffected by scratches and dust

ENERGY EFFICIENT

- Display shuts off when not in use to conserve battery life



MOTOTRBO DM1000 SERIES

Danimex™
WHEN YOU NEED TO TALK

RUGGED AND SIMPLE FOR THE EVERYDAY USER WHO NEEDS TO STAY CONNECTED

- Simple voice-only mobile radios
- Tough, rugged, dependable
- Efficiency features
- Compatible with MOTOTRBO feature-set
- Numeric or alphanumeric display



DM1600



DM1400

- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX

YOU'RE SIMPLY MORE EFFICIENT



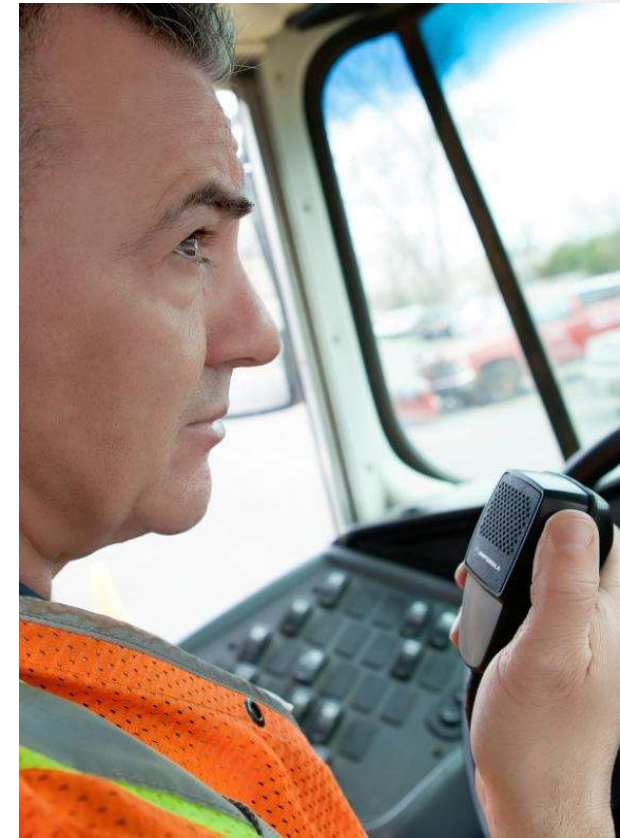
DM1000 SERIES details

SPECIFICATIONS

- **Dimensions:**
 - 44 x 169 x 134 mm, 1.3kg
- **Bands**
 - VHF (136-174 MHz)
 - UHF (403-470 MHz)
- **Transmitter Power**
 - 1-25 W or 25-45 W (VHF)
 - 1-25 W or 25-40 W (UHF)
- **Capacity:**
 - 16 Channels (DM1400)
 - 160 Channels (DM1600)
- **Audio output:**
 - 4W (internal speaker)
 - 7.5 W (external 8 Ω speaker)
 - 13 W (external, 4 Ω speaker)
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 2 Programmable Buttons (DM1400)
- 4 Programmable Buttons (DM1600)





MOTOTRBO DP2000e SERIES



A PERFECT BALANCE FOR THE BUSY WORKER WHO NEEDS EFFECTIVE COMMUNICATIONS

- Next-generation, affordable digital system radio
- Rugged and compact
- Plain and display/limited keypad models
- Optional TIA4950 HazLoc certification



DP2400e



DP2600e



- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX

YOU'RE MORE PRODUCTIVE, CONNECTED



DP2000e SERIES Details

SPECIFICATIONS

- **Dimensions:**
 - 122 x 56 x 36mm
 - 265 g (DP2400e), 282 g (DP2600e)
- **Bands**
 - VHF (136-174 MHz)
 - UHF (403-527 MHz)
 - 300MHz (DP2400e only) (300-360, 350-400 MHz)
- **Transmitter Power**
 - 1 or 4W (UHF, 300MHz)
 - 1 or 5W (VHF)
- **Capacity:**
 - 16 Channels (DP2400e)
 - 128 Channels (DP2600e)
- **Battery Life (analogue/digital)-high cap battery**
 - Up to 21 / 28.5 hours (VHF)
 - Up to 21 / 27.5 hours (UHF, 300MHz)
- **Dust and water rating: IP67**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 2 Programmable Buttons (DP2400e)
- 4 Programmable Buttons (DP2600e)
- IMPRES™ Audio Compatible
- SINC+ (optional)
- IMPRES Energy Compatible
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- Over-The-Air Programming (RF)





MOTOTRBO SL2600 SERIES

SLIM AND PORTABLE
PERFECTLY SUITED FOR BUSINESS
INSTANT COMMUNICATION, PROFESSIONAL STYLE

- Slim, lightweight stylish radio
- Elegant ergonomics for easy use
- Rugged and reliable
- Advanced technology for high performance
- Virtual 4 button keypad and display
- Integrated Bluetooth® and Wi-Fi®

DIRECT MODE
 CONVENTIONAL
 IP SITE CONNECT
 CAPACITY PLUS
 CAPACITY MAX



YOU'RE SHARPER, CONNECTED



SL2600 Details

SPECIFICATIONS

- **Dimensions:**
 - 126 x 55 x 23mm
 - 190 g
- **Bands**
 - VHF (136-174 MHz)
 - UHF (403-480 MHz)
- **Transmitter Power**
 - 1 or 2W (Analogue)
 - 1 or 3W (Digital)
- **Capacity:**
 - 256 Channels
- **Battery Life (analogue/digital)-high cap battery**
 - Up to 11 / 13.5 hours
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 1 Programmable Button
- SINC+ (optional)
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Covert Mode
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- Over-The-Air Programming (RF/Wi-Fi)
- Indoor Location Tracking (optional)
- Bluetooth 4.0 Audio and Data





MOTOTRBO DM2600

A PERFECT BALANCE FOR THE BUSY WORKER WHO NEEDS EFFECTIVE COMMUNICATIONS

- Mobile companion to DP2000 Series
- Affordable digital system radio
- Rugged and compact
- Available in VHF and UHF bands



- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX

YOU'RE MORE PRODUCTIVE, CONNECTED



DM2600 DETAILS

SPECIFICATIONS

- **Dimensions:**
 - 44 x 169 x 134 mm, 1.3 kg
- **Bands**
 - VHF (136-174 MHz)
 - UHF (403-470 MHz)
- **Transmitter Power**
 - 1-25 W or 25-45 W (VHF)
 - 1-25 W or 25-40 W (UHF)
- **Capacity:**
 - 256 Channels
- **Audio output:**
 - 4W (internal speaker)
 - 7.5 W (external 8 Ω speaker)
 - 13 W (external, 4 Ω speaker)
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 4 Programmable Buttons
- SINC+ (optional)
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- Over-The-Air Programming (RF)
- Telemetry Support (4 I/O Pins, 3 Buttons)





MOTOTRBO DP3000e SERIES

COMPACT AND RUGGED FOR THE MOBILE PROFESSIONAL WHO NEEDS EFFECTIVE COMMUNICATION

- Next-generation, high-performance compact portable
- Supports voice, data, text and apps
- Compatible with all MOTOTRBO system types
- Integrated Wi-Fi®, Bluetooth® 4.0 and GNSS
- Plain and colour display/limited keypad models
- IMPRES™ audio and energy compatible
- Full suite of accessories
- Optional TIA4950 HazLoc certification

DIRECT MODE
 CONVENTIONAL
 IP SITE CONNECT
 CAPACITY PLUS
 CAPACITY MAX



DP3441e

DP3661e

YOU'RE COMPLETELY CONNECTED



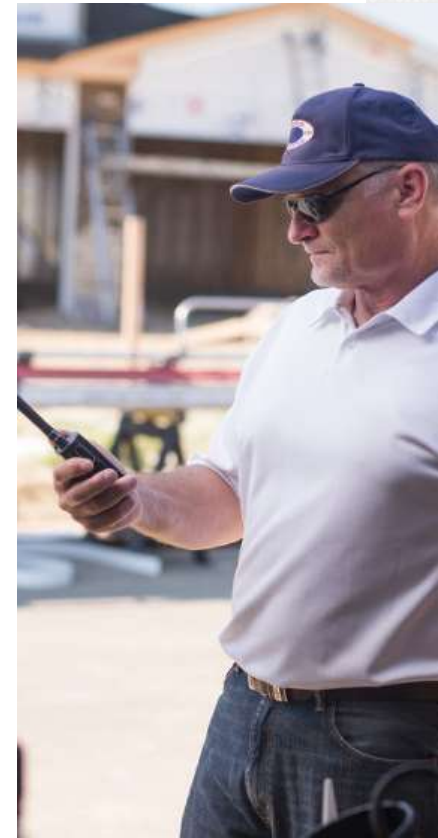
DP3000e SERIES DETAILS

SPECIFICATIONS

- **Dimensions with battery:**
 - 100 x 55 x 30 mm, 254 g (DP3441e)
 - 100 x 55 x 36 mm, 290 g (DP3661e)
- **Bands:**
 - VHF (136-174 MHz)
 - UHF (403-512 MHz)
- **Transmitter Power:**
 - 1 or 5 W (VHF)
 - 1 or 4 W (UHF)
- **Capacity:**
 - 32 Channels (DP3441e)
 - 1000 Channels (DP3661e)
- **Battery Life (digital/analogue)**
 - 27.5 / 20.5 hours (Low Voltage 3000 mAh battery)

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 2 Programmable Buttons (DP3441e)
- 4 Programmable Buttons (DP3661e)
- IMPRES™ Audio Compatible
- SINC+ (optional)
- IMPRES Energy Compatible
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- AES256 Encryption (optional)
- Over-The-Air Programming (RF/Wi-Fi)
- Integrated GPS/GLONASS
- Integrated Wi-Fi
- Bluetooth 4.0 Audio and Data
- Dedicated Orange Emergency Button
- Option Board Compatible
- Indoor Location Tracking (optional)
- Integrated Accelerometer for Mandown





MOTOTRBO DP4000e SERIES

TOTAL CONNECTIVITY FOR THE SKILLED PROFESSIONAL WHO REFUSES TO COMPROMISE

- Next-generation, high-performance portable radio
- Supports voice, data, text and apps
- Compatible with all MOTOTRBO system types
- Integrated Wi-Fi®, Bluetooth® 4.0 and GNSS
- Plain, limited keypad and full keypad models
- IMPRES™ audio and energy
- Full suite of accessories
- Optional TIA4950 HazLoc certification

- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX



YOU'RE COMPLETELY CONNECTED



DP4000e SERIES DETAILS

SPECIFICATIONS

- **Dimensions with battery:**
 - 130 x 55 x 34 mm, 295 g (DP440*e)
 - 130 x 55 x 36 mm, 330 g (DP460*e/DP480*e)
- **Bands:**
 - VHF (136-174 MHz)
 - UHF (403-527 MHz)
 - 300 (DP4401e, DP4801e only) (300-360, 350-400 MHz)
- **Transmitter Power:**
 - 1 or 4W (UHF, 300MHz)
 - 1 or 5 W (VHF)
- **Capacity:**
 - 32 Channels (DP440*e)
 - 1000 Channels (DP460*e/DP480*e)
- **Battery Life (digital/analogue – high cap battery):**
 - 28.0 / 21.5 hours (UHF, 300MHz)
 - 29.0 / 21.5 hours (VHF)
- **Waterproof to IP68, rugged to MIL-STD 810**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Freeform Texting (DP480*e)
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 3 Programmable Buttons (DP440*e)
- 5 Programmable Buttons (DP460*e/DP480*e)
- Dedicated Orange Emergency Button
- Vibrate Alert (optional)
- IMPRES™ Audio Compatible
- SINC+ (optional)
- IMPRES Energy Compatible
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- AES256 Encryption (optional)
- Over-The-Air Programming (RF/Wi-Fi)
- Integrated GPS/GLONASS (optional)
- Integrated Wi-Fi (optional)
- Bluetooth 4.0 Audio and Data (optional)
- Option Board Compatible
- Indoor Location Tracking (optional)
- Integrated Accelerometer for Mandown
- Telemetry Support (3 I/O Pins, 3 Buttons)





MOTOTRBO SL4000e SERIES

SLEEK AND SMART FOR THE BUSINESS LEADER WHO NEEDS COMPLETE CONTROL

- Next-generation slim portable radio
- Supports voice, data, text and apps
- Digital signalling only
- Compatible with all MOTOTRBO system types
- Integrated Wi-Fi and Bluetooth 4.0
- Colour screen and full keypad
- Model available with built in option board
- Full suite of accessories



SL4010e



SL4000e



DIRECT MODE
 CONVENTIONAL
 IP SITE CONNECT
 CAPACITY PLUS
 CAPACITY MAX

YOU'RE SMARTER, CONNECTED



SL4000e SERIES DETAILS

SPECIFICATIONS

- **Dimensions with slim battery:**
 - 121 x 55 x 17 mm, 154 g
- **Bands:**
 - UHF (403-470 MHz)
- **Transmitter Power:**
 - 1, 2 or 3 W (UHF)
- **Capacity:**
 - 1000 Channels
- **Battery Life:**
 - 14.3 hours (2200 mAh battery)
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Freeform Texting
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 2 Programmable Buttons
- Dedicated Orange Emergency Button
- Vibrate Alert
- Covert Mode

- SINC+ (optional)
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch
- Transmit Interrupt
- Enhanced Privacy
- AES256 Encryption (optional)
- Over-The-Air Programming (RF/Wi-Fi)
- Integrated Wi-Fi
- Bluetooth 4.0 Audio and Data (optional)
- Indoor Location Tracking (optional)
- Integrated Accelerometer for Mandown
- Telemetry Support (3 Buttons)



MOTOTRBO ATEX RADIOS

FOR CUSTOMERS REQUIRING DEVICES FOR USE IN POTENTIALLY EXPLOSIVE ENVIRONMENTS

- **ATEX Certification:**
 - Gas: Class II 2G Ex ib IIC T4 Gb
 - Dust: Class II 2D Ex ib IIIC T130 °C Db
 - Mining:
 - I M2 Ex ib I Mb (DP4000 Ex)
 - I M1 Ex ia I Ma (DP4000 Ex Ma)
- **IEC Ex Certification:**
 - Gas: Ex ib IIC T4 Gb
 - Dust: Ex ib IIIC T130°C Db
 - Mining:
 - Ex ib I Mb (DP4000 Ex)
 - Ex ia I Ma (DP4000 Ex Ma)
- Radios are colour-coded to enhance recognition
- Supporting ATEX/IEC Ex certified accessories available

- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX



DP4401 Ex
DP4401 Ex Ma

DP4801 Ex
DP4801 Ex Ma

YOU'RE SMARTER, CONNECTED



DP4000 Ex SERIES DETAILS

SPECIFICATIONS

- **Dimensions with battery:**
 - 138 x 57 x 38 mm, 456 g (DP4401 Ex / Ma)
 - 138 x 57 x 40 mm, 482 g (DP4801 Ex / Ma)
- **Bands:**
 - VHF (136-174 MHz)
 - UHF (403-470 MHz)
- **Transmitter Power:**
 - 1W (VHF, UHF)
- **Capacity:**
 - 32 Channels (DP4401 Ex / Ma)
 - 1000 Channels (DP4801 Ex / Ma)
- **Battery Life (digital/analogue – high cap battery):**
 - 19.0 / 16.0 hours (VHF, UHF)
- **Waterproof to IP67**

FEATURES

- Dedicated Orange Emergency Button
- 3 Programmable Buttons (DP4401 Ex / DP4401 Ex Ma)
- 5 Programmable Buttons (DP4801 Ex / DP4801 Ex Ma)
- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Freeform Texting (DP4801 Ex / Ma)
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- Integrated GPS (DP4000 Ex)
- Option Board Compatible (DP4801 Ex / Ma)
- IMPRES™ Audio Compatible
- SINC+ (optional)
- IMPRES Energy Compatible
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch
- Transmit Interrupt
- Enhanced Privacy
- AES256 Encryption (optional)
- Over-The-Air Programming (RF)
- Integrated Accelerometer for Mandown
- Telemetry Support (3 I/O Pins, 3 Buttons)





MOTOTRBO DM4000e SERIES

TOTAL CONNECTIVITY FOR THE SKILLED PROFESSIONAL WHO REFUSES TO COMPROMISE

- Mobile companion to DP4000e Series
- Next-generation mobile radio
- Enhanced voice, data, text and apps
- Compatible with all system types
- Integrated Wi-Fi®, Bluetooth® 4.0 and GPS/GLONASS
- Numeric or full colour display
- Full suite of accessories



DM460*e



DM440*e

- DIRECT MODE
- CONVENTIONAL
- IP SITE CONNECT
- CAPACITY PLUS
- CAPACITY MAX

YOU'RE COMPLETELY CONNECTED



DM4000e SERIES DETAILS

SPECIFICATIONS

- **Dimensions:**
 - 53 x 175 x 206 mm, 1.8 kg
- **Bands:**
 - VHF (136-174 MHz)
 - UHF (403-470, 450-527 MHz)
 - 300 (DM4401e, DM4601e) (300-360, 350-400 MHz)
- **Transmitter Power:**
 - 1-25 W or 25-45 W (VHF)
 - 1-25 W or 25-40 W (300 MHz, UHF)
- **Capacity:**
 - 99 Channels (DM440*e)
 - 1000 Channels (DM460*e)
- **Dust and water rating: IP54**

FEATURES

- Automatic Gain Control
- Trill Enhancement
- Emergency Alarm
- Lone Worker
- Pre-programmed Texting
- Freeform Texting (with keypad mic)
- Basic Privacy
- Voice Announcement
- Dual Capacity Direct Mode
- 4 Programmable Buttons
- IMPRES™ Audio Compatible
- SINC+ (optional)
- Intelligent Audio
- Extended Texting (up to 280 characters)
- Digital telephone Patch (optional)
- Transmit Interrupt (optional)
- Enhanced Privacy (optional)
- AES256 Encryption (optional)
- Over-The-Air Programming (RF/Wi-Fi)
- Integrated GPS/GLONASS (optional)
- Integrated Wi-Fi (optional)
- Bluetooth 4.0 Audio and Data (optional)
- Option Board Compatible
- Indoor Location Tracking (optional)
- Telemetry Support (5 I/O Pins, 3 Buttons)



HANDHELD CONTROL HEAD

TOTAL CONNECTIVITY FOR THE SKILLED PROFESSIONAL WHO REFUSES TO COMPROMISE

- Option for DM4000 / DM4000e Series mobile radios
- Handheld user interface for mobile radio
 - Full keyboard and colour screen
 - Similar user experience to DP4800e
- 1.8m coiled cord can stretch to 3m
 - Additional 4.9m extension cable available
- Mobile radio can be installed remotely
- Users can communicate while they move around within their vehicles
 - For example: ambulance staff, delivery truck drivers



DIRECT MODE CONVENTIONAL IP SITE CONNECT CAPACITY PLUS CAPACITY MAX

YOU'RE COMPLETELY CONNECTED

SLR5500

- 50W output, VHF and UHF, up to 100% duty cycle
- High receiver sensitivity
- High reliability
- Compatible with all system types



SLR5500

- High quality RF design
- Latest technology
- Optimized cooling
- ALT tested
- 2-year warranty
- Slim and compact
- Low power consumption
- Excellent serviceability
- Thoughtful touches



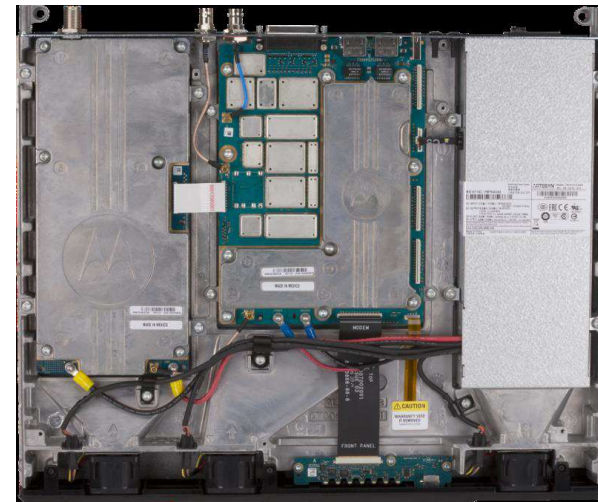
SLR5500

- 3A Internal battery charger
- 1A Aux power output
- External ref sync input
- Rack / desktop mounts
- 4W audio input
- GPIO ports



SLR5500

- Modular architecture with replaceable FRUs
- Internal self-test capability
- FRUs are pre-calibrated
- Licenses associated with chassis ID
- Front panel USB interface



- Provision for expansion

Danimex SLR5500 Duplexer dock



Mounting options

The SLR 5500 Duplexer dock has three options for placement: wall, desk or rack.

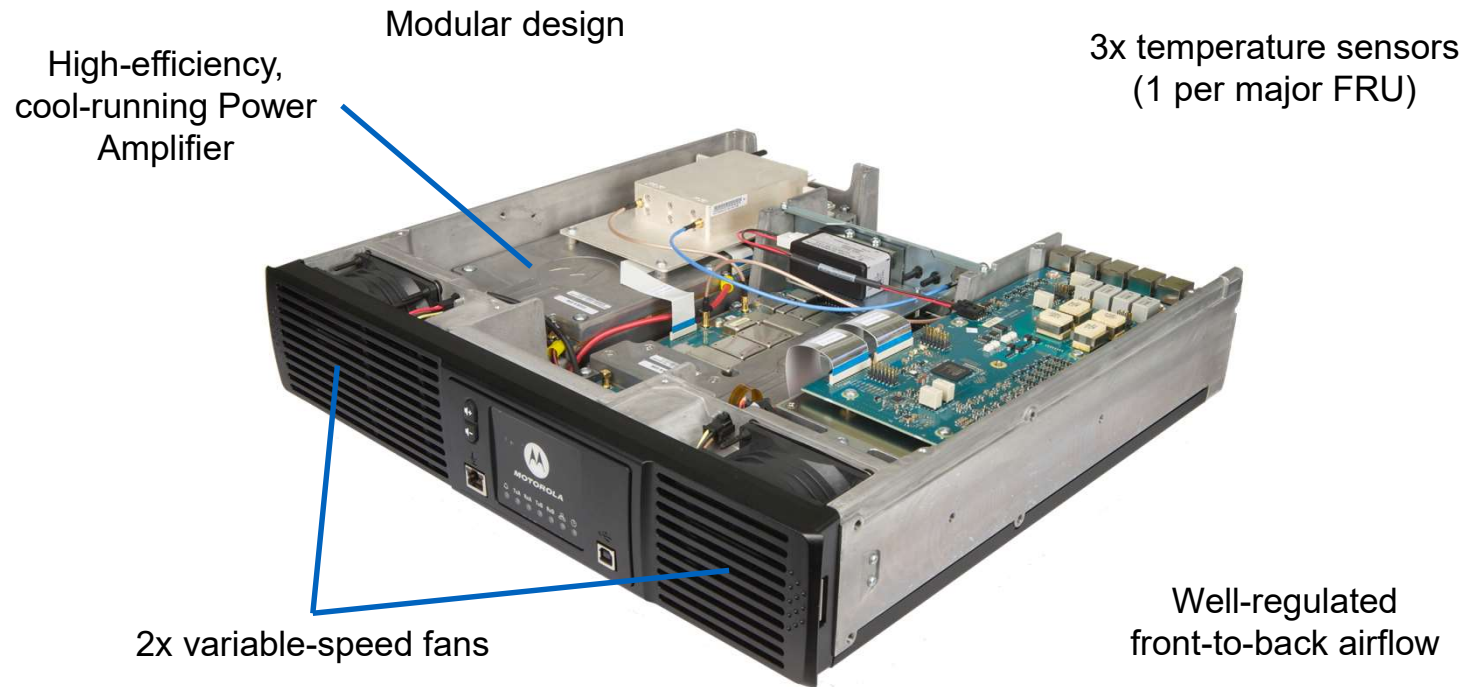
The Duplexer Dock has been developed to integrate the duplex filter directly into the same casing as the SLR 5500 repeater, making mounting solutions easier for wall, table and rack. The perfect complimentary product for all infrastructure uses, in a smart and rigid frame.

SLR8000

- Architectural design of the SLR 5000 repeater but with the higher specifications and performance of the MTR3000.
- Flexible configurable options.
- Drop-in replacement for MTR3000 with improvements in many areas.
- Future proof with increased processing capabilities and memory.



SLR8000



SLR8000

System Compatibility:

- Analog Conventional, Analog Voting (requires Wireline Card)
- Digital (MOTOTRBO): DMR Tier 2 Conventional Single Site, IP Site Connect, Capacity Plus Single-Site and Multi-Site, Connect Plus Trunking, Capacity Max
- LTR / Passport / MPT1327 Trunking

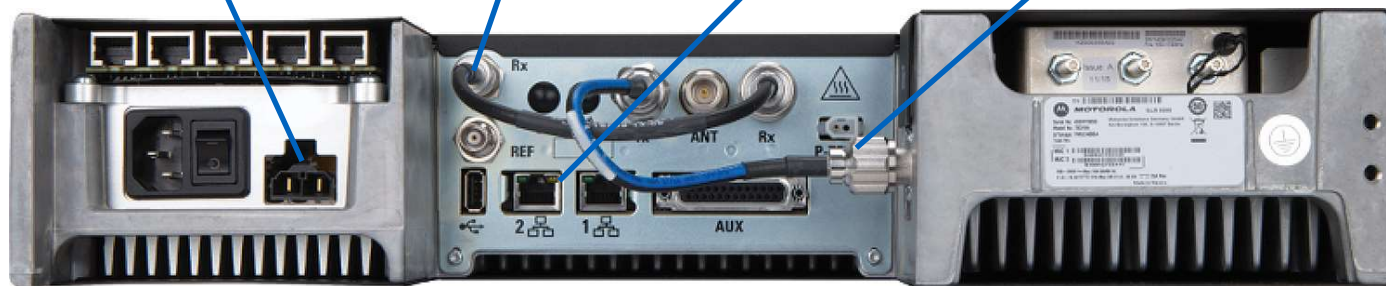
Power input options:

- 1) AC: 120-240
- 2) DC: 12-24
- 3) AC with battery revert

BNC Receive Port

Dual Ethernet ports

N Transmit Port



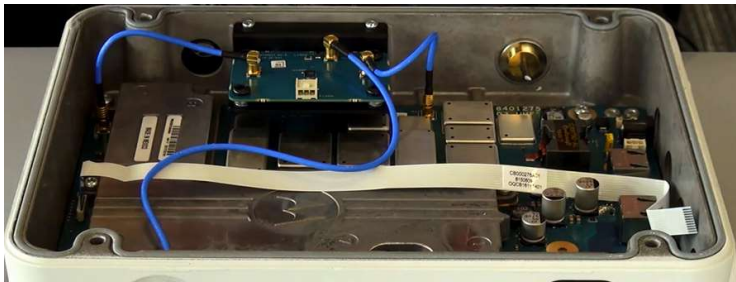
SLR1000



- Indoor installation
- Outdoor (wall or towermount) installation
- 10W
- DC operated (multiple powersources available)
- Options for
 - Extended Range Direct Mode Relay
 - Build in duplex filter

SLR1000

- Options for
 - Extended Range Direct Mode Relay



Source: MOTOROLASOLUTIONS HOWTO
SLR 1000 | PART 3: ANTENNA SWITCH
ACCESSORY INSTALLATION

SLR1000

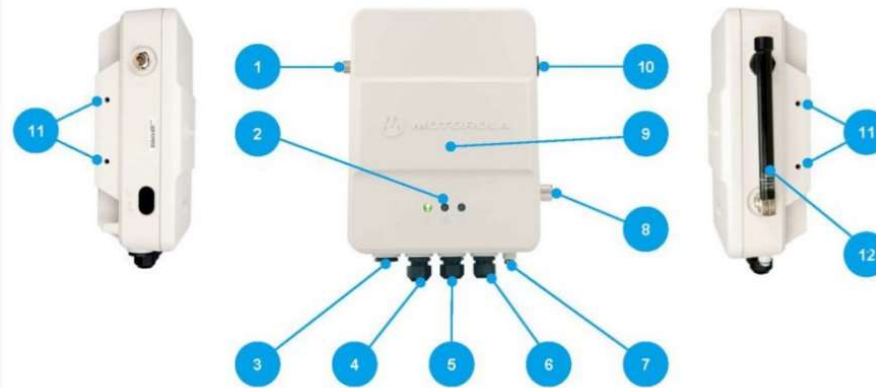
- Options for
 - Build in duplex filter



Source: MOTOROLASOLUTIONS HOWTO
SLR 1000 | PART 2: DUPLEXER ACCESSORY
INSTALLATION

SLR1000

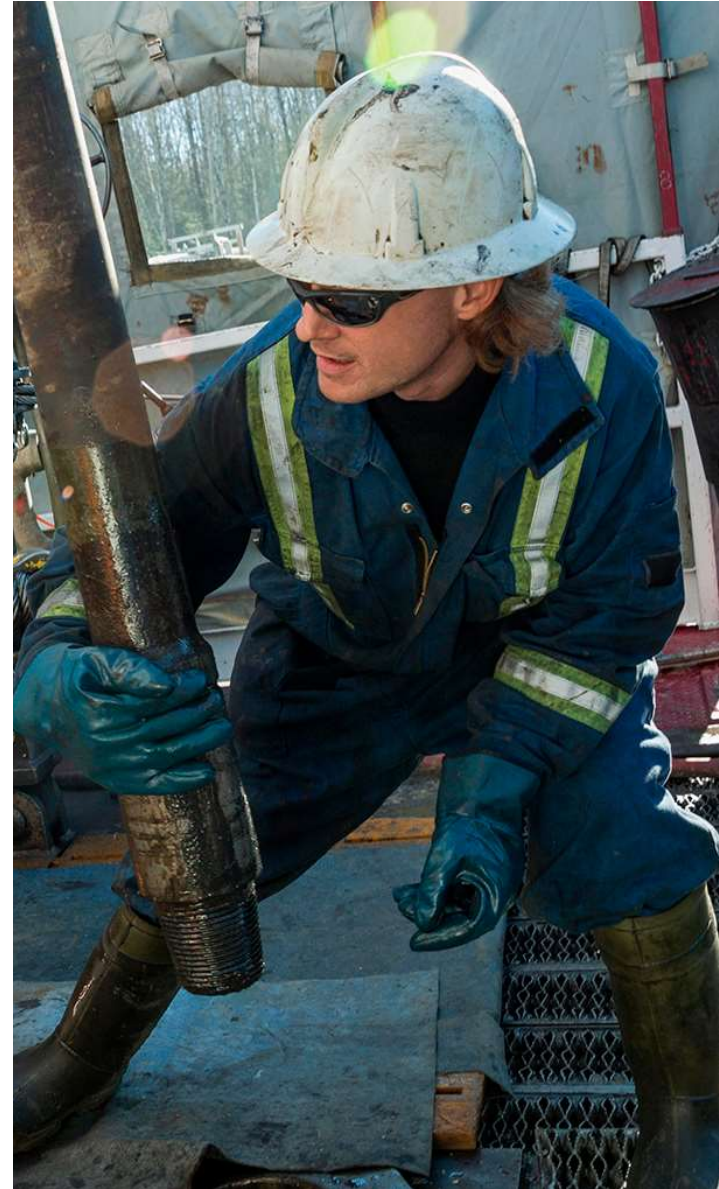
SLR 1000 LOW POWER REPEATER HIGHLIGHTS



- | | |
|--|---|
| 1 Receiver RF (Rx) input cable port | 7 Bonding earth connection |
| 2 Status LEDs | 8 Transmitter RF (Tx) output cable port |
| 3 Type B USB socket programming interface | 9 IP65 enclosure |
| 4 RJ-45 – Ethernet network connection | 10 Pressure equalizer vent |
| 5 RJ-45 Aux/accessory connector: Rx Audio, Tx Audio, PTT, 1 PPS and GPIO | 11 Screw holes for mounting brackets |
| 6 DC power inlet | 12 Optional antenna |



ACCESSORIES





MOTOTRBO ACCESSORIES

AUDIO



Choose from earpieces, headsets, remote speaker microphones (RSMs), active noise cancellation earphones.

ENERGY



Keep your communications up and running for the whole shift, with IMPRES™ smart batteries and chargers

WIRELESS



A comprehensive portfolio of Bluetooth accessories to keep you connected without wires.

MOBILE



A wide range of accessories for vehicle-mounted radios, including keypad microphones, remote mount kits and handheld control heads.

CARRY



Keep your radio safe and conveniently to hand, with the Motorola Solutions range of cases, belt clips, belt loops and holsters.

ANTENNAS



Innovative, high technology antennas that give you great performance without getting in your way.



IMPRES AUDIO

- **Motorola-patented technology for enhanced audio performance**
 - Enhanced performance Remote Speaker Microphones (RSMs), surveillance earpieces, temple transducer headsets, specialist Ear Microphone Solutions and visor, fist or handset-style microphones for in-vehicle installation
- **Optimal audio accessory performance**
 - Loudness
 - Clarity
 - Intelligibility
- **Talk loud or whisper**
 - Balances different users' levels of loudness
 - IMPRES automatically adjusts microphone gain to give consistent audio level at receiving radio
- **Talk close or further away**
 - Compensates for users who hold radio at different distances and angles
 - IMPRES automatically adjusts microphone gain to give consistent audio level at receiving radio
- **Background Noise Suppression**
 - IMPRES modifies microphone gain when user speaks, lowering the sensitivity and focusing on the spoken word
 - Suppresses background noise, resulting in clearer transmissions





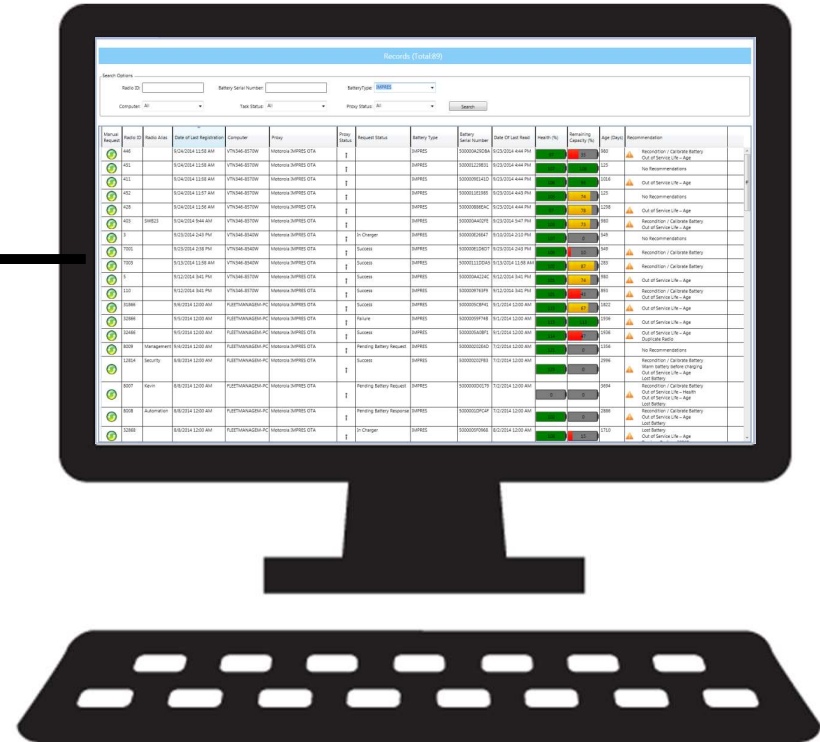
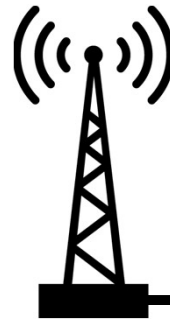
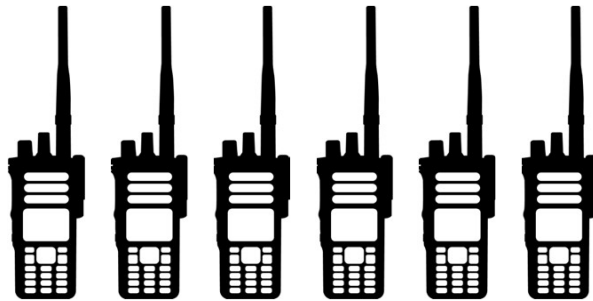
IMPRES ENERGY

- **Motorola-patented technology for enhanced battery lifecycle**
 - Maximised runtime, improved lifetime
 - IMPRES radio, battery and charger communicate to optimise performance
 - Can increase life of IMPRES battery by up to 43%
- **Smart batteries collect historical information on cell status, charge time and capacity**
- **Smart chargers read battery data and automatically schedule reconditioning cycles as necessary**
- **Desktop application interfaces to charger**
 - Dashboard view of status of batteries
 - Early prediction of failing batteries





IMPRES OVER-THE-AIR BATTERY MGT

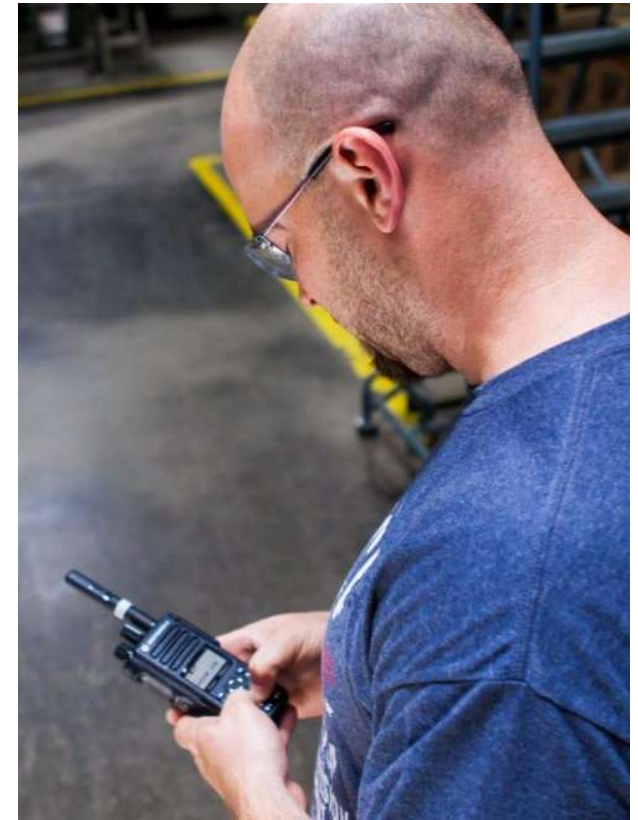


- Collects battery data automatically – even while radios are in use
- Generates long-term battery performance history records
- Allows early prediction of battery end-of-life



MOTOTRBO APPLICATIONS

- Taking you beyond simple voice communications, the MOTOTRBO Application Developer Programme (**ADP**) increases the value of your two-way radio system by giving you access to advanced functionality from industry innovators.
- Motorola has also partnered with premium application developers to create the Motorola Sold and Supported (**MSS**) programme: a range of applications that are uniquely integrated to your MOTOTRBO radio system.





MOTOTRBO ADP APPLICATIONS

COMMAND AND CONTROL



These applications work behind the scenes of your MOTOTRBO network to enhance the efficiency and responsiveness of your system.

PERSONNEL SAFETY



Increase the safety and accountability of your staff by deploying these applications. Features such as Man Down and Lone Worker can be linked to indoor and outdoor location services for maximum effectiveness.

EMAIL AND TEXT



Enhance productivity by connecting your radio network with your text and email system. Allow your staff to use advanced work order ticketing solutions, and streamline the flow of information between office and shop floor.

SYSTEM MONITORING



To get the best from your MOTOTRBO system, you need to know how it's performing. These applications give you a dashboard of metrics and parameters, with detailed logs helping you plan future growth.

INTEROPERABILITY



Connect your MOTOTRBO radio system to other communication systems. From analogue two-way radio systems to SIP telephone networks, you can increase efficiency and enhance collaboration.

VOICE DISPATCH



Giving you centralized control of your workforce, these applications allow your dispatcher to coordinate your staff effectively. They also enhance business connectivity by allowing telephony interconnections and patching.

LOCATION



Track your vehicles and your staff for improved safety, security and accountability. These applications allow you to make the most of MOTOTRBO's GPS capabilities, and some even offer indoor location tracking capabilities.

WORK TICKET MANAGEMENT



These applications enhance efficiency and accountability in the workplace using text-based issue management software. They can be integrated with your existing work-order management solution or operated independently.



MOTOROLA SOLD & SUPPORTED

- A range of applications from premium application development partners that add unique value to your MOTOTRBO radio system
- Offered for sale through Motorola Solutions
- Supported through the standard Motorola Solutions service process
- Uniquely integrated with MOTOTRBO
 - Apps have exclusive access to wireline voice interface
 - Developers have early access to software releases





SmartPTT PLUS

- Software-based Dispatch Console
- Compatible with all MOTOTRBO system types
- Direct wireline IP connection to system
 - No control stations required
 - Gracefully scalable
 - Access to all call types
- Reliable, redundant architecture
- Easily-customized user interface
- Optional functionality
 - GPS / Indoor Location-Tracking
 - Voice Recording
 - Telephone Interconnect
 - 4-Wire analogue Interconnect



**SOLD AND
SUPPORTED**



TRBOnet PLUS

- Software-based Dispatch Console
- Compatible with all MOTOTRBO system types
- Direct wireline IP connection to system
 - No control stations required
 - Gracefully scalable
 - Access to all call types
- Reliable, redundant architecture
- Easily-customized user interface
- Optional functionality
 - GPS / Indoor Location-Tracking
 - Voice Recording
 - Telephone Interconnect



**SOLD AND
SUPPORTED**



MOTOTRBO SUMMARY

- A broad portfolio of products, systems, applications and services
- All the advantages of digital radio, with a graceful migration from analogue
- Compatible with WAVE Unified Communications
- Rugged, dependable devices
- Reliable availability
- Manageable cost of ownership
- Customisable solutions



MOTOTRBO SUMMARY

- A broad portfolio of products, systems, applications and services



Motorola				
	Technology name	Portable	Mobile	Repeater
Tier III	CAP MAX	DP4xxxe	DM4xxxe	SLR5500
				SLR8000
		SL4xxxe		SL1000
Tier II½	Capacity Plus Multisite			
		DP3/4xxxe, DP/SL2xxxe,	DM4xxxe/ DM2xxxe	SLR5500, SLR8000, SLR1000
				SLR5500, SLR8000, SLR1000
Tier II	Capacity Plus single site IP-Site-Connect / conventional			
		DP3/4xxxe, DP/SL2xxxe, DP/SL1xxx	DM4xxxe/ DM2xxxe/ DM1xxx	SLR5500, SLR8000, SLR1000

POSITIONING THE VALUE OF MOTOTRBO™ SOFTWARE

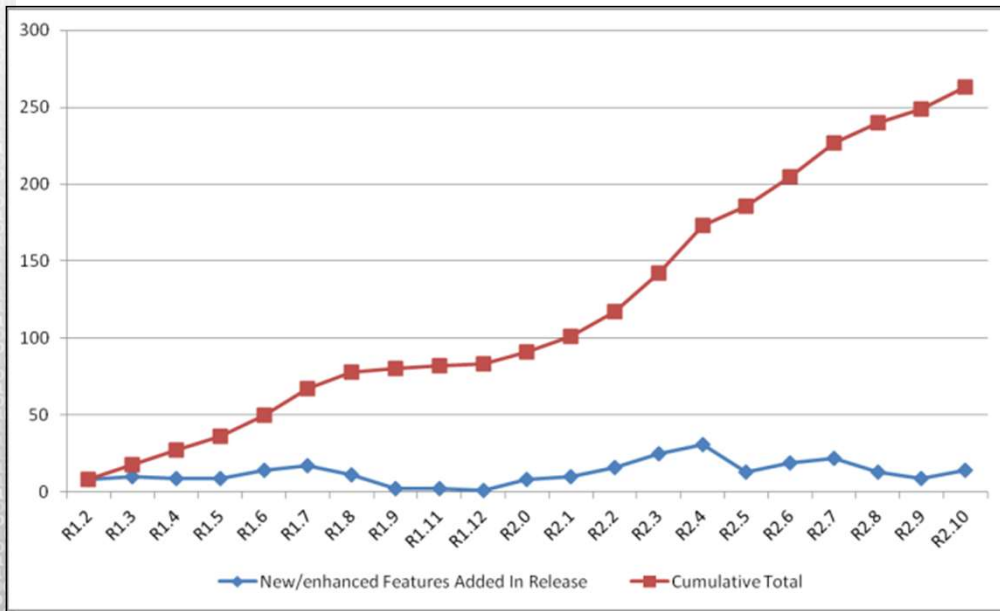


Chart excludes adding new hardware models and Connect Plus features

- Each software release adds new features and enhances current performance
- Keeping your MOTOTRBO Software current reduces security vulnerabilities, fixes identified defects and enables new feature functionality
- Regular updates provide greater reliability, security, capabilities and performance to your users minimising unforeseen costs and service disruptions, extending the lifespan of your MOTOTRBO radios, mobiles and infrastructure.

Software capabilities grow over time



A school principal at a rural school district uses **transmit interrupt (R1.2)** to break into the channel and report a missing student.

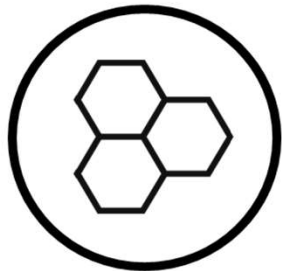


A logistics manager sends an updated address via a **work order ticket (R2.3)** and the **text to speech (R2.4)** feature reads it out loud and clear to the driver.



The dispatcher at a plant coordinates with the fork truck driver. The radio **noise-cancellation (R2.5)** cuts through the machine's noise.

THE VALUE OF MOTOTRBO™ SOFTWARE



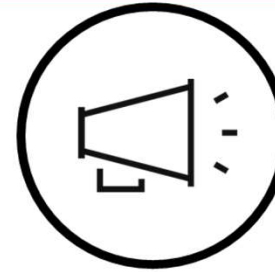
SYSTEMS COVERAGE, CAPACITY AND CAPABILITY

- Conventional R1.0
- IP Site Connect R1.4
- Capacity Plus (single site) R1.5
- Dynamic Mixed Mode (DMM) R1.6
- MPT1327 Analogue Trunking R1.8 / R2.3
- Capacity Plus (multi site) R1.9 / R2.0
- Dual Capacity Direct Mode R2.1
- Over-the-Air Programming R2.1
- Capacity Plus (multi site) 15 sites R1.11 / R2.2
- Capacity Plus up to 24 ch/site R2.3
- Digital Voting R2.3
- OTA Battery Management R2.5
- Wi-Fi Enablement R2.5
- Capacity Max R2.6
- Capacity Max 250 sites R2.7
- Extended Range Direct Mode R2.7
- MOTOTRBO Link R2.9



SECURITY PRIVACY, SAFETY AND PROTECTION

- Basic privacy R1.2
- Enhanced Privacy R1.4
- Transmit Interrupt R1.6
- Radio Password R1.7
- Repeater Authorisation R1.7
- Restricted Access to System (RAS) R1.11 / R2.2
- Enhanced Codeplug Password Protection R2.3
- AES Privacy R2.3
- CPS Read Write Password Protection R2.3
- Auto Registration Service Support R2.6
- Authenticated Radio Disable R2.6
- Restricted Access To System as Standard R2.7
- DDMS User Sign-In/Out Authentication R2.7
- Option to use Fixed Privacy Key Decryption R2.7
- Authenticated Remote Monitor R2.7
- Certificate Based Wi-Fi Access R2.9
- Cybersecurity Update R2.10



AUDIO CLARITY, LOUDNESS AND INTELLIGIBILITY

- Configurable Digital AGC R1.3
- Minimum Volume Offset R1.7
- Intelligent Audio R2.0
- Voice Announcement R2.0
- Acoustic Feedback (AF) Suppressor R2.2
- Microphone Distortion Control R2.2
- User Selectable Audio Profile R2.4
- Trill Enhancement R2.4
- SINC+ R2.5
- AGC Enhancement R2.5
- High volume clarity & wind noise mitigation R2.5
- Acoustic Feedback Suppressor R2.6
- Audio Enhancements R2.6
- Received Audio Leveling R2.7
- Fixed Volume Alert Offset R2.8



USABILITY SPEED, EASE AND FUNCTIONALITY

- Last text recall R1.2
- Channel Free Audible Tone R1.2
- VOX R1.4
- Lone Worker R1.5
- Text Message Draft Folder R1.5
- Additional Emergency Systems R1.6
- Configurable RSSI Threshold R1.6
- Display Alias R1.7
- Enhanced Search Capability for Contact List R1.7
- Text Message Alert R1.8
- RSSI Display Value R1.9
- Predictive Text Input R2.0
- Home Channel Reminder R2.4
- Text-to-Speech R2.4
- Event & Distance Driven Location Updates R2.4
- Switch Speaker R2.4
- 280 characters Text Messages R2.5
- Integrated Mandown R2.5
- Mute Mode (prog button or face down) R2.7
- Dynamic Group Number Assignment R2.10

Q&A

- Offline Questions can be directed to your relevant sales person or to
 - Webinar@Danimex.com