

CHANNEL NEWSLETTER

NEWS AND UPDATES MARCH 2018



MOTOTRBO NOW MARITIME CERTIFIED FOR DEPLOYMENT ONBOARD VESSELS FOR NON-OPERATION CRITICAL COMMUNICATION

Selected MOTOTRBO DP4000e, DM4000e and SLR 5500 models* are now Maritime certified for deployment on board vessels for non-operation critical communication. The Declaration of Conformity (DoC) certificates for these MOTOTRBO models have been updated to reflect the Maritime certification and are available to download from Motorola Online.



APPLICABLE STANDARDS

The relevant standards that MOTOTRBO has been certified to meet are:

- Compass Safe Distance:
 - ISO25862
- EMC:
 - EN60945:2002-10
 - EN 301 843-1 (by similarity to EN60945)
 - EN 301 843-2 (by similarity to EN60945)
- RF:
 - EN300 720 v2.1.1 (analogue / digital mode)
 - EN300 720 currently applies to analogue mode and 6.25kHz FDMA digital mode, so for 12.5kHz 2-slot TDMA (DMR) digital mode MOTOTRBO was assessed by a RED / MED Notified Body and a type examination certificate issued.
- Safety:
 - Same as Radio Equipment Directive (RED) safety standards

* See Appendix for full list of certified models

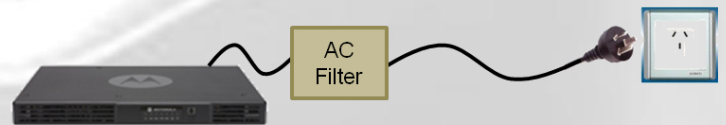
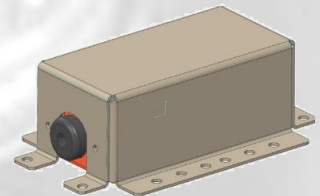
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CONFIGURATION CONSIDERATIONS

- Power Level:
 - The power level for Maritime deployment is limited to 2W maximum.
 - For portables, “High Power” must be re-tuned for 2W or lower using the MOTOTRBO Tuner.
 - For mobiles and repeaters, “High Power” must be set to 2W or lower using the MOTOTRBO CPS-RM.
- Frequencies:
 - The frequencies for Maritime deployment are limited to allocated maritime single frequency simplex channels and two frequency repeater channels in the UHF band.
- Channel Spacing:
 - For the DP4000e series portables, the channel spacing in analogue mode is limited to 12.5kHz (for bands utilising both 12.5kHz and 25kHz channel separations).
- Global Navigation Satellite System (GNSS):
 - The GNSS setting (if used) is limited to GPS.
- Repeater Installation
 - In order to meet the applicable Maritime standards, the SLR 5500 repeater must be installed with an AC Filter (part number DSFMT00FM03).
 - A separate AC Filter is required for each SLR 5500 repeater.
 - To order this filter, please contact a member of the Motorola Solutions Order Management team (note: this filter is not available to order on Motorola Online).



SYSTEM INTEGRATOR RESPONSIBILITIES

- Configuration:
 - Configuring of MOTOTRBO equipment deployed onboard vessels in accordance with the Maritime regulations (for frequencies, power levels etc.).
- Installation:
 - Installing and commissioning of MOTOTRBO infrastructure deployed onboard vessels in accordance with good work practices including the installation of an AC Filter (DSFMT00FM03) with each SLR 5500 repeater.
- Labelling:
 - Attaching of any Maritime specific labelling to MOTOTRBO equipment deployed onboard vessels in accordance with the Maritime regulations.

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ATEX

The current International Maritime Organisation (IMO) Safety of Life at Sea (SOLAS) regulations require vessels constructed on or after 1 July 2014 to carry at least 2 intrinsically safe portable communications devices for fire-fighter communications. SOLAS does not mandate Maritime compliancy for these fire-fighter communication devices nor does it mandate a specific intrinsically safe standard. As such, this SOLAS requirement can currently be satisfied by Motorola Solutions DP4000e UL/TIA and DP4000 Ex portables.

Until now fire-fighter communications devices have fallen outside the scope of the EU Marine Equipment Directive (MED). However, MED updates are currently being drafted to include fire-fighter's two way radio telephone apparatus. It is expected that this draft shall be presented to the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) for endorsement in March 2018. As it currently stands, the draft references a number of standards for fire-fighter communications devices including SOLAS, ATEX and the previously mentioned standards applicable to the Maritime certification of DP4000e, DM4000e and SLR5500. Once the updated EU MED comes into force, any fire-fighter communications devices deployed on board vessels registered in MED countries shall be required to comply with the updated EU MED which in summary calls for Maritime certified ATEX portables.

Motorola Solutions is currently working on the Maritime certification of the UHF DP4000 Ex portables (for both analogue and digital mode) and we expect to complete this activity in advance of the updated MED coming into force. In the meantime, DP4000 Ex fully complies with the SOLAS requirement for intrinsically safe portable communications devices for fire-fighter communications.

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APPENDIX - MOTOTRBO MODELS THAT HAVE RECEIVED MARITIME CERTIFICATION

DP4400e UHF (MDH56RDC9VA1AN)

- PMUE3682BAAEAA (DP4400e 403-527 4W NKP)

DP4401e UHF (MDH56RDC9RA1AN)

- PMUE3681BAAEAA (DP4401e 403-527 4W NKP GNSS BT WiFi)

DP4600e UHF (MDH56RDQ9VA1AN)

- PMUE3679BAQEAA (DP4600e 403-527 4W LKP)

DP4601e UHF (MDH56RDQ9RA1AN)

- PMUE3678BAQEAA (DP4601e 403-527 4W LKP GNSS BT WiFi)

DP4800e UHF (MDH56RDN9VA1AN)

- PMUE3676BACEAA (DP4800e 403-527 4W FKP)
- PMUE3676BAHEAA (DP4800e 403-527 4W ARB FKP)
- PMUE3676BAGEAA (DP4800e 403-527 4W CYR FKP)
- PMUE3676BAPEAA (DP4800e 403-527 4W HEB FKP)

DP4801e UHF (MDH56RDN9RA1AN)

- PMUE3675BACEAA (DP4801e 403-527 4W FKP GNSS BT WiFi)
- PMUE3675BAHEAA (DP4801e 403-527 4W ARB FKP GNSS BT WiFi)
- PMUE3675BAGEAA (DP4801e 403-527 4W CYR FKP GNSS BT WiFi)
- PMUE3675BAPEAA (DP4801e 403-527 4W HEB FKP GNSS BT WiFi)
- PMUE3675BPCEAA (DP4801e 403-527 4W FKP GNSS BT WiFi MPT)

DM4400e UHF (MDM28QNC9VA2AN)

- PMUE3646CAAEAA (DM4400e 403-470M 25W ND)

DM4401e UHF (MDM28QNC9RA2AN)

- PMUE3646CALEAA (DM4401e 403-470M 25W WiFi/BT/GNSS ND)

DM4600e UHF (MDM28QNN9VA2AN)

- PMUE3646CABEAA (DM4600e 403-470M 25W CD)

DM4601e UHF (MDM28QNN9RA2AN)

- PMUE3646CAMEAA (DM4601e 403-470M 25W WiFi/BT/GNSS CD)

SLR 5500 UHF (DR10QCGANQ1AN)

- PMUE4392AAAEAA (SLR 5500 403-470M 50W)