EXCEPTIONAL PERFORMANCE FOR EVERYDAY HAZARDS

MOTOTRBO™ DGP™8550EX

Working on a pipeline or a production line, you rely on clear communication and current information. With MOTOTRBO DGP™8550EX, you get the best of two-way radio functionality with the latest digital technology – for greater capacity, clearer audio and integrated data applications. Plus the certainty your radios and accessories are intrinsically safe so they'll withstand the toughest environments – flammable gas, vapors and combustible dust.

EXPERIENCE DIGITAL, SEAMLESSLY

By integrating voice and data, the DGP™8550EX increases efficiency and productivity with applications like Text Messaging and GPS tracking as well as customized data applications such as network management, dispatch consoles, work order ticket management and more with the industry-leading Application Developer Program.

TDMA digital technology delivers twice the calling capacity for the price of one frequency license, with crystal-clear voice communications. DGP™8550EX radios operate on digital conventional, IP Site Connect, Capacity Plus and Lync Capacity Plus. Leading-edge IMPRES™ batteries, chargers and audio accessories ensure longer talk time and clearer audio. And because the DGP™8550EX radio can operate on your existing analog conventional and digital conventional. The system can easily begin migrating to digital when your time and budget allow.

RELIABLE DURABILITY

Safe, reliable communications are critical in hazardous environments. DGP™8550EX is intrinsically safe when purchased and equipped with an ATEX/Inmetro battery, so you can operate it where flammable gas, vapors or combustible dust may be present. Make sure you use Motorola certified batteries – the only ones certified by ATEX/Inmetro as "intrinsically safe" for use with the radio. DGP™8550EX is backed by a two-year Standard Warranty, and minimum 1-year warranty for accessories.

PRODUCT SPEC SHEET
DGP™8550EX PORTABLE TWO-WAY RADIO

GENERAL SPECIFICATIONS

Frequency Band	UHF Band 1, VHF
Zone Capacity	250
Max. No. of Conv. Channels or Personality Capacity	1000
Dimensions (HxWxL) with Li-Ion non-FM Battery	5.5 x 2.2 x 1.6in 138.5 x 56.7 x 39.8mm (H x W x D)
Weight with Li-Ion non-FM Battery	17oz 482g
Power Supply	7.5 V
FCC Description	UHF Band 1: ABZ99FT4095 VHF: ABZ99FT3093
IC Description	UHF Band 1: 109AB-99FT4095 VHF: 109AB-99FT3093
Battery life[1] with NNTN8287 IMPRES Li-Ion Battery	Analog: 12.0 hours (typ) 10.0 hours (min) Digital: 16.0 hours (typ) 13.5 hours (min)

RECEIVER

Frequencies	UHF Band 1 (403-470MHz) VHF (136-174MHz)
Channel Spacing	12.5/20/25kHz
Frequency Stability (-30° C, +60° C, +25° C)	±0.5 ppm
Analog Sensitivity (12 dB SINAD) Typical	0.25 uV
Intermodulation (TIA603C)	70 dB
Adjacent Channel Selectivity (TIA603C) - 1T	60dB @ 12.5kHz 70dB @ 20/25kHz
Adjacent Channel Selectivity (TIA603C) - 2T	60dB @ 12.5kHz 70dB @ 20/25kHz
Spurious Rejection (TIA603C)	70 dB
Rated Audio	0.5 W
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40dB @ 12.5kHz -45dB @ 20/25kHz
Audio Response	TIA603C
Conducted Spurious Emission (ETSI)	-57 dBm

TRANSMITTER

Frequencies	UHF Band 1 (403-470MHz) VHF (136-174MHz)
Talkaround	UHF Band 1 (403-470MHz) VHF (136-174MHz)
Channel Spacing	12.5/20/25kHz
Frequency Stability (-30° C, +60° C)	± 0.5 ppm
Low Power Output	1 W
High Power Output	UHF Band 1: 4W VHF: 5W
Modulation Limiting	±2.5kHz @ 12.5kHz ±4.0kHz @ 20kHz ±5.0kHz @ 25kHz
FM Hum and Noise	-40dB @ 12.5kHz -45dB @ 20/25kHz
Conducted / Rated Emission (ETSI)	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 25 kHz
Audio Response	TIA603C
Audio Distortion (per EIA)	3%
FM Modulation	12.5 kHz: 11K0F3E 25 kHz: 16K0F3E

ENVIRONMENTAL SPECIFICATIONS

Allowed Operating Temperature Range Inside Hazardous Environments	-30° C to +60° C
Operating Temperature Range Outside Hazardous Environments	-30° C to +60° C
Storage Temperature (Radio Only)	-40° C to +85° C
Thermal Shock	MIL STD 810D, E, F, G
Humidity	MIL STD 810D, E, F, G
ESD	IEC-801-2KV
Water Intrusion (Outside Hazardous Environments)	IEC 60529 - IP67
Dust Intrusion (Inside Hazardous Environments)	IEC 60529 - IP6x
Packaging Test	MIL STD 810D, E, F, G

DGP™8550EX radio models, when properly equipped with the battery NNTN7789A, are certified for permitted use for Ex ib IIC T4, Class II, Groups E, F, G, and Class III, and DIP A21 TA 110 °C.

[1] Average Battery Life in analog trunking mode.

[2] Average Battery Life in conventional mode with battery saver enabled.

Trunking System Support: Type II 800/900 MHz Privacy Plus™ Enhanced, SMARTNET®, StartSite™, SmartWorks™ and SmartZone™ analog trunked systems.

For digital mode and GPS receiver specifications, please refer to MOTOTRBO DGP digital model specifications.

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements. Version 1 01/11

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REINVENTING
DIGITAL

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