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 (HxWxD)**: 5.5 x 2.2 x 1.6in with Li-Ion non-FM Battery
- **Weight with Li-Ion non-FM Battery**: 17oz
- **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 (-30º C, +60º C, +25º 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 (-30º C, +60º 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 -30º C to +60º C
- **Operating Temperature Range**: Outside Hazardous Environments -30º C to +60º C
- **Storage Temperature (Radio Only)**: -40º C to +85º 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

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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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DGP™8550EX radio models, when properly equipped with the battery NNTN7788A, 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.