



EXCEPTIONAL PERFORMANCE IN HAZARDOUS ENVIRONMENTS

MOTOTRBO™ XPR™ 6580 I.S.

Working on a pipeline or a production line, you rely on clear communication and current information. With **MOTOTRBO XPR 6580 I.S.**, 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 certified intrinsically safe to operate in the toughest environments – flammable gas, vapors and combustible dust.

EXPERIENCE DIGITAL, SEAMLESSLY

By integrating voice and data, the **XPR 6580 I.S.** 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. **XPR 6580 I.S.** radios operate on digital conventional, IP Site Connect, Capacity Plus and Connect Plus systems. Leading-edge IMPRES™ batteries, chargers and audio accessories ensure longer talk time and clearer audio. And because the **XPR 6580 I.S.** radio can operate on your existing analog conventional or SMARTNET® / Privacy Plus™ trunking system, you can complete a software upgrade to begin migrating to digital when your time and budget allow.

RELIABLE DURABILITY

Safe, reliable communications are critical in hazardous environments. **XPR 6580 I.S.** is intrinsically safe when purchased and equipped with a CSA certified battery, so you can operate it where flammable gas, vapors or combustible dust may be present. Make sure you use Motorola certified batteries and leading-edge accessories, too – the only ones certified by CSA as “intrinsically safe” for use with the radio. **XPR 6580 I.S.** is backed by a 2-year Standard Warranty, 1-year Repair Service Advantage (US)/Extended Warranty (Canada) and minimum 1-year warranty for accessories.

PRODUCT SPEC SHEET
CSA PORTABLE TWO-WAY RADIO

GENERAL SPECIFICATIONS

Frequency Band	800 and 900 MHz
Number of Systems	20
Zone Capacity	130
Max. No. of Conv. Channels or Personality Capacity	240
Talkgroup Capacity per Zone	16
Dimensions (HxWxL) with Li-Ion non-FM Battery	5.6 in H x 2.21 in W x 1.79 in L (142.3 mm H x 56.2 mm W x 45.3 mm L)
Weight with Li-Ion non-FM Battery	18.37 oz (522 g) / 19.47 oz (552 g) with antenna
Power Supply	7.4 V Nominal
FCC Description	ABZ99FT5013
IC Description	109AB-99FT5013
Average battery life with NNTN8287 IMPRES Li-Ion battery	Analog ¹ : 13 hours 10 hours minimum (1750 mAh) Analog ² : 14.5 hours 11 hours minimum (1750 mAh) Digital: 17 hours 13 hours minimum (1750 mAh)

RECEIVER

Frequencies	800 MHz: 854-866 and 869-870 MHz 900 MHz: 935-941 MHz
Channel Spacing	800 MHz: 12.5 and 25 kHz 900 MHz: 12.5 kHz
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	60 dB @ 12.5 kHz 70 dB @ 25 kHz
Adjacent Channel Selectivity (TIA603C) - 2T	45 dB @ 12.5 kHz 70 dB @ 25 kHz
Spurious Rejection (TIA603C)	70 dB
Rated Audio	.5 W
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz
Audio Response	TIA603C
Conducted Spurious Emission (ETSI)	-57 dBm

TRANSMITTER

Frequencies	800 MHz: 809-821 and 824-825 MHz 900 MHz: 896-902 MHz
Talkaround	800 MHz: 854-866 and 869-870 MHz 900 MHz: 935-941 MHz
Channel Spacing	800 MHz: 12.5 and 25 kHz 900 MHz: 12.5 kHz
Frequency Stability (-30° C, +60° C)	+/- 0.5 ppm
Low Power Output	1 W
High Power Output	2 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz
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	Per MIL-STD
Humidity	Per MIL-STD
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 and E



XPR 6580 I.S. radio models, when properly equipped with the battery NNTN8287A, are certified for permitted use for Ex a IIC T4, Class I, Groups A, B, C, D, Class II, Groups E, F, G, and Class III, and DIP A21 TA 160 °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 XPR digital model specifications in 800/900 MHz.

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements. Version 2 03/12

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MOTOTRBO
DIGITAL
REMASTERED.

