



DP4000 Ex - ATEX Portable radios

Protection mode:

Type of protection: II 2G Ex ib IIC T4 Gb
 II 2D Ex ib IIIC T130 °C Db
 I M2 Ex ib I Mb / I M1 Ex ia I Ma

Class of temperature: T4

Ambient Temp : -20/+55°C

Zones : 1-2-21-22

Description:

Threats from explosive gas, combustible dust or chemical vapours, from an oil rig to an underground mine, your workers confront them daily. Safe, reliable communication is absolutely critical in such dangerous environments. That's where the power and performance of MOTOTRBO digital radios stand out. The MOTOTRBO DP4000 Ex Series combines the best of two-way radio functionality with the latest digital technology. It integrates voice and data seamlessly, offers enhanced features that are easy to use, and delivers increased capacity to efficiently connect all your crews. With exceptional voice quality, long battery life and ATEX-rated for safety, the radios keep your workers connected safely and productively, wherever the job takes them.



DP4401 Ex (Non-Display) DP4801 Ex (Display) DP4401 Ex Ma (Non-Display) DP4801 Ex Ma (Display)

DP4401 Ex - Rugged, easy to use, non-display model for hazardous open environments

DP4801 Ex - Adds a full keypad and large colour display for access to advanced features like texting and caller ID

DP4401 Ex Ma - Rugged, easy to use, non-display model for underground mining environments.

DP4801 Ex Ma - Full keypad, colour screen model, for underground mining environments.





DP4000 Ex - ATEX Portable radios

	DP4801 Ex DISPLAY	DP4401 Ex NON-DISPLAY	DP4801 Ex Ma DISPLAY	DP4401 Ex Ma NON-DISPLAY
Frequency Band	UHF B1 (403-470MHz) and VHF (136-174MHz)			
Zone Capacity	250	2	250	2
Max. No. of Conv. Channels or Personality Capacity	1000	32	1000	32
Dimensions (H x W x L) with Li-Ion battery	138.5 x 56.7 x 39.8mm	138.5 x 56.7 x 37.8mm	138.5 x 56.7 x 39.8mm	138.5 x 56.7 x 37.8mm
Weight with Li-Ion battery	482.5g	455.5g	482.5g	455.5g
Power Supply	7.4 V Nominal			
FCC Description	UHF B1: AB299FT4091 VHF: AB299FT3089		—	
Programmable Buttons	5	3	5	3
Integrated GPS Receiver	Yes		No	
IC Description	UHF: 109AB-99FT4091 VHF: 109AB-99FT3089		—	
Gas Rating	ATEX: Class II 2G Ex ib IIC T4 Gb IECEx: Ex ib IIC T4 Gb			
Dust Rating	ATEX: Class II 2D Ex ib IIIC T130 °C Db IECEx: Ex ib IIIC T130°C Db			
Mining Rating	ATEX: I M2 Ex ib I Mb IECEx: Ex ib I Mb		ATEX: I M1 Ex ia I Ma IECEx: Ex ia I Ma	
Battery Part Number	NNTN8359		NNTN8840	
Typical** battery life Analogue			16 hrs	
Typical** battery life Digital			19 hrs	

RECEIVER

	ALL MODELS
Channel Spacing	12.5/20/25KHz
Frequency Stability (-30° C, +60° C, +25° C)	±0.5ppm
Analogue Sensitivity (12 dB SINAD) Typical	0.25uV
Intermodulation (TIA603C)	70dB
Adjacent Channel Selectivity (TIA603) - 1T	60dB @ 12.5kHz / 70dB @ 20/25kHz
Adjacent Channel Selectivity (TIA603C) - 2T	45dB @ 12.5kHz / 70dB @ 20/25kHz
Spurious Rejection (TIA603C)	70dB
Rated Audio	0.5W
Audio Distortion @ Rated Audio	5%, 3% (typical)
Hum and Noise	-40dB @ 12.5kHz -45dB @ 20/25kHz
Audio Response	TIA603C
Conducted Spurious Emission (ETSI)	-57dBm

TRANSMITTER

	ALL MODELS
Channel Spacing	12.5/20/25KHz
Frequency Stability (-30° C, +60° C)	±0.5ppm
Power Output	1W
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 < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 20/25kHz
Audio Response	TIA603C
Audio Distortion (per EIA)	3%
FM Modulation	12.5 kHz: 11K0F3E 25 kHz: 16K0F3E

ENVIRONMENTAL SPECIFICATIONS

	ALL MODELS
Operating Temperature	-20°C to +55°C
Storage Temperature	-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	IEC-60529 IP67
Packaging Test	MIL STD 810D, E, F, G
Ingress Protection (IP) Rating	IP67*

