MTP850Ex
IECEx & Atex Certified
TETRA Portable Radio 806-870 Mhz

ATEX Specifications

ATEX Rating	Gas	II 2G Ex ib IIC T4
	Dust	II 2D Ex tD A21 IP6x ib D21 T90°C
IEC EX Rating	Gas	Ex ib IIC T4 (Approved for Zone 1 & 2, Equipment Group II, Gas Group C, Temperature Class T4, -20°C to +50°C)
	Dust	Ex tD A21 IP6x ib D21 T90°C (Approved for Zone 21 & 22, Equipment Group II)

General Specifications

Dimensions H x W x D (mm)	135 x 55 x 38
Weight (typ) g	400 (including battery, antenna)
Battery	725 mAh, 7.2V
	12 hours, typ 5/5/90 duty cycle

Environmental Specifications

Operating Temperature (°C)	-25 to +50 (Hazardous Environments)
	-20 to +60 (Non-Hazardous Environments)
Storage Temperature (°C)	-40 to +85
Humidity	ETS 300 019-1-7 class 5.1 and 5.2
Dust and Water	IP64 (Cat 2)
Shock, drop and vibration	ETS 300 019-1-5 class 5M2

RF Specifications

Frequency Bands (MHz)	806 – 870
RF Channel Bandwidth (kHz)	25
Transmitted RF Power	1W
RF Power Control	3 steps of 5 dB
RF Power Level Accuracy	+/- dB 2
Receiver Class	A & B
Receiver Static Sensitivity (dBm)	-112 minimum, -115 typical
Receiver Dynamic Sensitivity (dBm)	-103 minimum, -107 typical

GPS Specifications

Simultaneous Satellites	12
Mode of Operation	Autonomous or assisted (A-GPS)
GPS Antenna	Integrated in TETRA antenna
Sensitivity	-152 dBm / -182dBw
Accuracy	5 meter (50% probable)
Location Protocols	ETSI LIP
	Motorola LRRP

Voice Services

Talkgoups	2048 (TMO) & 1024 (DMO)	
Phone Book	1000 persons	
Scan Lists	40 lists, 20 talkgroups / list	
TMO Services	Group Call	Late entry
	Private Call	Half / Full Duplex
	Telephony	Full Duplex
	DGNA	up to 2047 groups
DMO Services	Group Call	Late entry
	Private Call	
	Compatibility	Gateway & Repeater
Emergency	Smart Emergency	DMO / TMO / DMO to TMO
	Hot Mic	Configurable timers
	Location	Send on emergency
	Target Address	Individual or Group
Other Services		Ambience Listening
		Transmit Inhibit

Data Services

Short Data Service (SDS)		
	Inbox	20 messages
	Target Address	Individual Address
	Voice Interaction	Send / receive during calls
Packet Data	Single or Multi Slot	7.2 kbps – 28.8 kbps gross
PEI		AT Commands
		TNP1; enables simultaneous SDS & PD

Security Features

Network Access	Temporary Enable / Disable (Stun)

The information contained in this document may be subject to change without further notice

- All product features are subject to infrastructure support
- Selected features are subject to optional software upgrade
- The availability of accessories included in this document are subject to change without notice

Accelerated Life Testing
Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life, EIA RS-316B in Shock, Vibration, Dust, Humidity, IP54 for Sealing.

MIL-STD 810C, D and E
Stamp of approval from the U.S. Military for use in rough environments.

ISO 9001 Standard
Compliance with ISO 9001 Standard–an international quality system assurance on design, development, production, installation and servicing of a product.

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