Motorola CEP400 Digital Portable Radio

Heavyweight capabilities, lightweight portability

Motorola's CEP400 TETRA portable delivers the high performance and dependability required for enhanced workforce productivity and assured user safety.

Leveraging the best features of a two-way radio and a cellular phone, the lightweight and robust CEP400 has been engineered to ensure loud and clear communications even in high noise work environments.

Built to Last

CEP400 has been made to the highest quality levels and exceeds all 11 categories in the MIL-810 standard. Further, like all Motorola TETRA radios, CEP400 has been designed to pass an Accelerated Life Test simulating over 5 years use; these tests ensure it will stand up to the toughest conditions and provide durability that helps to drive down lifecycle support costs.

One Device for all Critical Communications

CEP400 takes advantage of all the benefits of TETRA digital technology to drive workforce productivity and safety. These include exceptional audio quality with full duplex voice services, PABX and PSTN interconnection, individual and group calls, priority and emergency calls, Short Data Services and Localisation Services.

CEP400 also benefits from the inherent protection of TETRA digital signaling. Coupled with the Mutual Authentication feature, CEP400 provides a secure communications platform.

Simple but Powerful User Interface

To minimise staff training costs, CEP400 leverages an instantly familiar cellular phone style user interface. It also includes a large colour (or greyscale) display that supports 65,536 vivid colours and large scalable fonts. Usability is further enhanced through a customisable menu and simplified keypad that combine to make device interaction fast and intuitive.

Cost Efficient Terminal Solution

CEP400 is complemented by a complete terminal solutions portfolio designed for efficient operations:

- Remote programming to ensure cost effective rollout of new services and simplified radio management

- CEP400 leverages the same wide range of accessories as the flagship MTP850 radio to increase investment security. This range includes audio, power, carry and invehicle solutions

Key Benefits

High Performance, Built to Last

- Rugged and lightweight, designed for optimum reliability in harsh conditions

- Superior audio quality for the most demanding environments

- Comprehensive range of accessories to provide a tailored solution

- Cellular phone style, optimised user interface

- Remote programming facility for cost effective radio terminal management

- Large high resolution colour (or grey scale) display

Unified Communications, Integrated Safety

- Trunked and conventional operation modes

- Full duplex PABX and PSTN interconnection

- Personnel safety and emergency call features

- Optional integrated GPS for personnel tracking

General

Dimensions HxWxD mm	125 x 50 x 37.5	(with standard battery)
Weight g	170	(radio only)
	240	(with standard battery)
Battery Performance	Standard Li-Ion	
mAh	1850	
Duty Cycle (5/5/90) hours	> 23 hours	
Duty Cycle (5/35/60) hours	> 17 hours	
Talk time hours	3.5 hours	

RF Specifications

Frequency Bands (MHz)	380 – 430
	806 – 870
Switching Bandwidth TMO (MHz)	50 (380-430)
	19 (TX: 806-825, RX:851-870)
Switching Bandwidth DMO (MHz)	50 (380-430)
	19 (851-870)
RF Channel Bandwidth (kHz)	25
Transmitter RF Power	1W
RF Power Control	3 Steps of 5 dB
RF Power Level Accuracy	+/- 2 dB
Receiver Class	A & B
Receiver Static Sensitivity (dBm)	-112 minimum, -115 typical
Receiver Dynamic Sensitivity (dBm)	-103 minimum, -107 typical

Environmental Specifications

Operating Temperature °C	-30 to +60
Storage Temperature °C	-40 to +85
Humidity	ETS 300 019-1-7 class 7.3E
Dust and Water Ingress Protection	IP54 per IEC 60529
Shock, drop and vibration	ETS 300-019 1-7 class 5M3

Options

GPS License
Local Language Options
Colour and Greyscale Display Option

Peripherals and Accessories

Audio	Earpieces, headsets and remote speaker microphones
Batteries	1850 mAh battery
Carrying and In-Vehicle Solutions	Various carrying solutions and vehicle adapters
Antenna	Includes stub, whip options
Remote Programming	Via Intelligent terminal management solution

Security Services

Authentication	Mutual

Data Services

Short Data	STATUS messaging in TMO & DMO
	Short Data Service messaging in TMO & DMO
	Short Data applications
AT Commands	Reduced set of AT commands (excludes voice control)

Location Services

Simultaneous Satellites	12
GPS Antenna	Helical integrated into TETRA antenna
Sensitivity	-152 dBm / -182 dBW
Accuracy	5 meter (50% probable); 10 meter (95% probable)
Protocols	ETSI LIP & Motorola LRRP

User Interface

Display	Colour (or Gray Scale) 130x130 pixels with 65,536 vivid colours
	Backlight I Flip screen and scalable text font options
Screen Saver	Gif image & text) (user defined)
Universal Time Display	
Multiple Languages	
Keypad Lock	
Talkgroup Management	User friendly, flexible, fast and efficient interface
Talkgroups – TMO	2048
Talkgroups – DMO	1024
Talkgroup Folders	Dual layer folder structure (folder/sub-folder) 256 folders
Favourite Folders	Up to 3 (to store favourite talk groups)
Menu	Customisable to user needs
	Menu Shortcuts
	Menu Configuration
Contacts Management	Cellular phone style
Contacts List	Up to 1000 contacts
	Up to 6 numbers per contact, max. 2000 entries
Multiple Dialling Methods	User defined
	Supports Virtual Keypad
Fast/Flexible Call Response	Private Call Response to a Group Call via One Touch button
Alerting Modes	Vibrator and Multiple ringtones
Message Manager	Cellular phone style
Text Message Inbox	20 messages
Intelligent Keypad Text input	
Status List	100 alias messages
Country/Network Code List	100
Scan lists	40 lists of 20 talkgroups
User Controls	
Multi-function Rotary Knob	Volume, Talkgroup scroll and/or selection
One Touch Buttons	Single button activation for multiple functions
Adaptive Audio Control	Selects best audio profile for a given environment

Voice Services

Full Duplex	TMO	Private, PABX, PSTN, Emergency
Half Duplex	TMO	Private, Group, Emergency
	DMO	Private, Group, Emergency Inter-MNI, Gateway, Repeater
Dialling		Direct, Scroll, Speed, One Touch button/key
		Call History Redial
Emergency and Safety (User-defined)	Tactical	Emergency Group Call to ATTACHED talkgroup
	Non-Tactical	Emergency Group Call to DEDICATED talkgroup
	Individual	Emergency Call to PREDEFINED party
	HOT MIC	Talk without pressing PTT button (user enabled)
	Status Message	Message sent to dispatch console (user enabled)
	DMO to TMO	Enter DMO emergency (with/without gateway) or enter TMO emergency
Pre-emptive Priority Calls		

For more information please contact your local Motorola Authorised Dealer or Distributor

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