Motorola Discreet TCR1000
Covert TETRA Terminal
Design to Match the Mission

Key Features:

- Part of Motorola's highly capable and industry leading TETRA Radio portfolio

- Secure Communication for safety and protection of information

- TMO TETRA Class 2 / 3 Air Interface Encryption (SCK, CCK, DCK, GCK)

- Air Interface Encryption

- End-End Encryption

- 1W, Class 4 Tx Power

- Whisper mode for discrete use

- Integrated GPS option that allows users to be located in need of assistance

- Wide range of covert accessories to give officers flexibility in the way the radio can be worn

- Connection to extension battery for increased operational life

- Uses the same standard battery as cellular handsets

- CPS-Lite facility for changing the talk groups with a TETRA PDA

- Unique body worn double-loop antenna option increases range

- Semi rigid antenna, adds flexibility in terms of how the radio can be worn

Motorola's Discreet TCR1000 Covert TETRA terminal provides undercover officers with a communications tool specially designed for their security, comfort and intuitive use in all situations.

Motorola is a world leader in the development and deployment of TETRA communication solutions, and the new Discreet TCR1000 Covert TETRA Radio from Motorola is the smallest, full function body worn TETRA radio available.

The Motorola Discreet TCR1000 is the ideal solution to ensure secure communications in surveillance covert type operations allowing officers to blend right into the crowd. Motorola's Discreet TCR1000 Tetra radio delivers high quality communication in a light and discrete package for those critical undercover applications.

There are no compromises in the design of the Motorola Discreet TCR1000. Motorola worked closely with police forces to ensure that it will be intuitive and simple to operate, truly Technology that's Second Nature. The Motorola Discreet TCR1000 incorporates control features specifically matched to the needs of officers in Covert operations, and is engineered to be easily hidden inside of light clothing. A unique portfolio of Covert accessories complement the Motorola Discreet TCR1000 and offer additional flexible options for undercover officers. This radio operates at 1 watt and the option for a body mounted antenna ensures excellent coverage and maintains the discreteness of the radio.

TCW 1000 SPECIFICATIONS

PHYSICAL

Weight (typ) g	< 180	Including battery

RF SPECIFICATIONS

Frequency Bands (MHz)	380 – 430
RF Channel Bandwidth (kHz)	25
Transmitter RF Power	1W
RF Power Control	3 Steps of 5 dB
RF Power Level Accuracy	+/- db 2
Receiver Class	A and B
Receiver Static Sensitivity (dBm)	-112 minimum, -115 typical
Receiver Dynamic Sensitivity (dBm)	-103 minimum, -106 typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (°C)	-30 to +60	Note : LiIon battery performance degrades at -10
Storage Temperature (°C)	-40 to +85	
Humidity	ETS300 019-1-7 class 7.3E, up to 95% R.H @ 50°C for 8 Hours	
Dust and Water	IP54 (cat.2)	
Shock, drop and vibration	ETS 300 019-1-7 class 5M3	

VOICE SERVICES

Talkgroups	Stored	2048 (TMO) & 1024 (DMO)
	Accessible via RCU	10 TMO/DMO pairs from Talk Groups stored
Emergency	Smart emergency	TMO to DMO / DMO to TMO automatic switching options
	Hot Mic	Configurable timers for automatic open mic
	Location	Location (GPS) sent with emergency
	Target Address	Sent to individual or group address (selected or dedicated)
	Alarm	Emergency status
Other Services	DGNA	
	Ambience Listening	
	Transmit Inhibit (TxI)	ETSI Enhanced Mode TxI with On / Off Status Messaging

SECURITY FEATURES (ETSI TETRA STANDARD AND SECURITY AND FRAUD PREVENTION GROUP-SFPG COMPLIANT)

Air Interface Encryption	Algorithms	ETSI Standard: TEA1, TEA2, TEA3
	Security Classes	Class1 (Clear), Class2 (SCK), Class3 (DCK, CCK & GCK)
End-to-End encryption	Tamper Protected Motorola UCM hardware encryption module	
Algorithm	AES Standard (FIPS197)	
Key Provisioning	Secure provisioning tool (Key Variable Loader KVL) for Air Interface and End-to-End	
Key management	Over The Air Rekeying (OTAR) for SCK (TMO and DMO) and Class 3 (CCK & GCK)	
	Over The Air Key management (OTAK) for End-to-End encryption	
	Radio user-initiated manual (emergency) deletion of radio security information	
Network Access Control	Authentication	Infrastructure initiated and made mutual by terminal
Remote terminal management	Temporary Enable / Disable (Stun) *	
	Permanent Enable / Disable (Kill) *	
	*For remote management of lost or stolen or compromised radios or radios in transit (for both Air Interface and End-to-End encryption)	

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

• Please note all product features are subject to infrastructure support

• Selected features are subject to optional or future software upgrade

• The availability of accessories in this document are subject to change without notice

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

MOTOROLA

TCR1000/SPEC-ENG(05/08)

www.motorola.com/tetra