

## Technical Specification

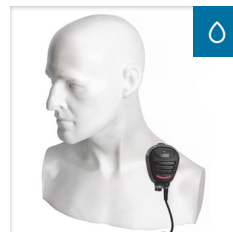
General Specification		Security	
Model number	HT786-MaxMesh	Encryption AES 128 bit. Key programming through keypad or PC host. Unit Elimination Remote radio elimination	
Frequency range	MHz – 225-470MHz	Power	
Channel spacing	All WF included in the radio-selection via the MMI	Battery	2 cell Li-Ion rechargeable battery @ 7.4VDC nominal
Net preset	40 selectable channels	Power consumption	Average battery life > 5 hours @ 1:17:8 ratio (transmit: standby: receive ratio)
Data interface	USB, RS232	Battery capacity	High capacity: 2400 mAh
Integrated GPS	±10 m CEP (circular error probability)	Environmental	
Frequency stability	±2.5 ppm	Shock/vibration	MIL STD 810 C/D/E/F
Frequency tuning	1 KHz, 5 KHz, 10 KHz, 100 KHz	IP rating	IP68
Synchronization method	dynamically self-organizing TDMA synchronization method (no need for GPS)	Temperature	-20°C- +55°C
Physical Specifications		Transmitter	
Weight	280g, excluding battery and antenna	Power output	Programmable 100mW/500mW/1W/2W
Dimensions	130 mm (h) x 59 mm (w) x 37 mm (d)	Antenna	50ΩOmni antenna – 265mm length Frequency: 225 MHz – 512 MHz Type: Whip antenna
Modes and waveforms (WF)		Receiver	
Narrowband	WF 25 KHz QPSK, voice broadcast only network	Narrowband sensitivity	< -109dBm @0.1% BER
Voice and data mode	WF GMSK 384 KHz, up to 32 units with 3 hops and up to 72 Kbps data rate	Middleband sensitivity	< -100dBm @ 0.1 BER
Voice and high rate data mode	WF GMSK 1.5 MHz, up to 64 units 6 hops and up to 720 kbps OR up to 32 units 8 hops and up to 720 kbps data rate	Wideband sensitivity	< -95dBm@ 0.1% BER

## Accessories

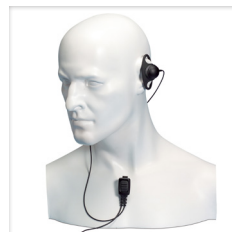
Supplied package includes: Li-Ion battery pack, rapid charger, spring clip & high efficiency antenna



**CSBHT**  
Six-way charger



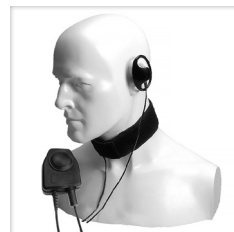
**CMP750E**  
Heavy duty speaker mic submersible



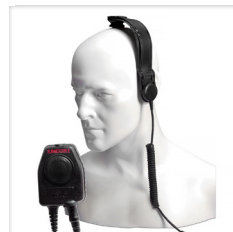
**EA12/750**  
Earpiece microphone



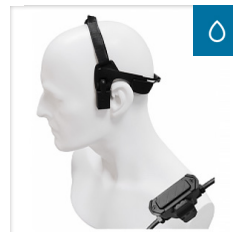
**EA15/750**  
Covert earpiece / microphone



**CXR16/750**  
Throat mic. Bone conductive



**CXR5/750**  
Skull mic. Bone conductive



**CXE19/750**  
Bone conductive both transmit & receive



**CHP750S**  
Hard hat eardefender, submersible PTT



**CHP750HS**  
Headband eardefender, submersible PTT

Submersible products are represented with a water droplet.

All specifications are subject to change without notice. For the complete range of accessories please visit our website.

# MaxMesh Tactical UHF

## Mission Critical Communications

- Multi-hop robust voice & data communications
- Dynamic, self-forming, self-healing mesh network
- MIL-STD 810 construction
- Multi-layer security
- IP68 submersible

## Connecting Beyond Network Reach

SELF FORMING NETWORK



## Contact

For more information about our products please contact us:

+44 (0)20 8236 0032

info@entel.co.uk

entel.co.uk

www.entel.co.uk



# MaxMesh Tactical UHF

## Digital Portable Radios

MaxMesh Tactical UHF portables employ cutting edge Mesh Radio technology ensuring robust, clear and efficient voice and data communications even in the most challenging of mission-critical environments.

When teams work together in critical, tactical, and emergency situations, they need to instantly deploy reliable, quickly and easily communications – without interruption and regardless of their physical surroundings. The maxtech networks MaxMesh Tactical UHF portables enable them to do just this.

## Why MaxMesh Tactical UHF?

Superior voice quality	relaying to create a reliable and robust network over large distances.
Can be deployed instantly anywhere, anytime	Covering the 225-470 MHz frequency range, this multiband radio provides a variety of waveforms:
No need for repeater base stations to increase range	Narrowband, 25 KHz (QPSK) – Voice Broadcast mode
Does not require a GPS signal for network synchronization	Middleband, 384 KHz (GMSK) – Up to 32 units with 3 hops & up to 72 Kbps data rate
Proprietary over-air protocol and AES 128 for enhanced security	Wideband, 1.5 MHz (GMSK) – Up to 64 units 6 hops & up to 720 kbps data rate OR up to 32 units 8 hops and up to 720 kbps data rate
Overcomes physical obstacles by applying an advanced dynamic mesh network with no user intervention	

### The MaxMesh Tactical UHF Portable

is a unique software upgradeable radio that creates a dynamic, self-forming, and self-healing network to enable long-range voice and data transmission whilst on the move.

A patented algorithm is used to ensure superior voice quality and high data throughput for indoor and outdoor operations, without the need for GPS synchronization, to enable units to join and leave the network dynamically without any user intervention.

The MaxMesh Tactical UHF ensures multi-hop voice and data

The MaxMesh Tactical UHF portable also includes a built-in GPS which provides situational awareness information to command and control applications, or other management systems.

Transmitted voice and data is highly secure due to a multi-layer security method that includes a proprietary air protocol and AES 128 encryption.

The combination of MaxMesh technology with advanced SDR capabilities ensures quick and efficient transmission of mission-critical voice and data in a wide range of applications and in the most challenging environments.



# Main Features



Creates a robust, long-range, dynamic, self-forming and self-healing voice and data network

Instantaneous deployment of mission-critical voice and data services without the need for any infrastructure

Supports a wide range of applications in the most challenging environments

40 selectable net preset channels within the 225-470 MHz frequency range

Provides three waveforms: Narrowband 25 KHz (QPSK), Middleband 384 KHz (GMSK) and Wideband 1.5 MHz (GMSK)

Uses a multi-layer security method that includes a proprietary over-air protocol and AES 128

Includes a built-in GPS for situational awareness information

Supports multiple languages

Robust, IP68 (5m 1h) Submersible & MIL STD 810 compliant

Provides high speed data communications (up-to 720Kbs)