

Business  
Critical  
Communications

Entel

# DTEX Series

Intrinsically Safe Commercial-Grade Land portables



Commercial-grade construction



ATEX II 2G Ex ib IIA T4 Gb  
ATEX II 2G Ex ib IIC T4 Gb



Ex ib IIA T4 Gb



DMR Digital & analogue modes



Submersible IP68



Tough | CRYSTAL  
CLEAR  
AUDIO  
Submersible  
Dependable



# DTE<sub>x</sub> Series

## Intrinsically Safe Commercial-Grade Land portables

The ultra-durable DTE<sub>x</sub> series is the latest addition to our range of Intrinsically Safe radios. The rugged DTE<sub>x</sub> delivers exceptionally loud audio coupled with outstanding audio clarity, plus the ergonomic controls are specifically designed for gloved hand use.

Combining the latest DMR digital technology, emergency features and the highest ATEX gas group ratings\*, the DTE<sub>x</sub> series delivers best-in-class range, safety and reliability. Exceeding MIL-STD-810 and a market-leading IP68 rating (2 metres 4 hours) the fully submersible DTE<sub>x</sub> can be depended on to withstand the most extreme and hostile environments.

### Customisable Configuration

The fully featured and versatile DTE<sub>x</sub> radios can be configured for basic push-to-talk (PTT) operation or the more advanced features that you would expect of a high-tier two-way radio. The high-contrast OLED screen can be customised to display simple large-character or more detailed information.



Basic screen

### Superior Audio

Our DTE<sub>x</sub> portables deliver loud and crisp audio, no matter what operational environment you are in. The full DTE<sub>x</sub> accessory range incorporates a robust locking plug and high-grade cable, whilst intelligent speech tailoring technology automatically detects the type of accessory connected and optimises the audio accordingly to deliver the very best performance.



Advanced screen

### Safety Features You Can Rely On

DTE<sub>x</sub> radios support digital Lone-Worker, Man-Down and Emergency Button, these three levels of safety ensure an alarm is raised.

### IP68 2 Metres, 4 Hours Submersible

The DTE<sub>x</sub> Series delivers the highest submersibility rating of any manufacturer. Ensuring protection against corrosion and likely hazards encountered in the most arduous of environments, these radios are constructed to withstand total immersion in water to a depth of 2 metres for 4 hours.

### \*Intrinsically Safe

**ATEX Approved IIC** - The DT900 series of ATEX-certified portables meet IIC T4 - the most stringent ATEX ratings as per EU Directive 2014/34/EU.

**ATEX Approved IIA** - For users not restricted to the IIC 1 watt regulatory classification, the DT800 series of ATEX certified portables meet IIA T4 with 4 watts of transmitter power.

**IECEx Approval** - The DT500 series of Intrinsically Safe certified portables are suitable for users outside Europe who do not need to comply with the European ATEX standard.



Non-display model

Display model





## Migrate To Digital Your Way

DTEEx radios utilise both analogue and DMR digital technologies. Supporting both technologies ensures backwards compatibility with existing analogue radio systems and a simple migration path to the many benefits of digital communications.

## Voice annunciation

This programmable feature is available on our non-display models only. It assures the user that they've selected the correct channel, allowing them to focus on the task at hand. This feature also gives a confirmation of button settings, e.g. 'Keylock On', 'Keylock Off', battery level status and warns user when the battery is low.

## Intelligent Batteries, Audio Accessories & BA Support

Entel's intelligent batteries and accessories are designed to deliver optimum performance and safety. In digital mode, the lithium-ion battery endurance on DT900 radios is more than 18 hours from a single charge!

From simple earpieces to bone conductive options for extremely high noise environments, we offer a vast range of Entel-original audio accessories. In addition, third-party Breathing Apparatus comms kits are also supported.

Entel's intelligent speech tailoring technology optimises audio to match the connected accessory; ensuring the very best clarity, volume and natural-sounding audio.

## Simple End-User Programming

Our unique and simple-to-use PC app is included free of charge with the purchase of your DTEEx radio. There is no longer any need to return a handset to your dealer to reprogram or update. With the user-friendly app, you can simply transfer the programming data sent to you by your Entel dealer, future-proofing software updates or add new features to your DTEEx radios.

## High-Grade Accessory Interface

The rugged, multi-pin interface and Micro-USB socket are both submersible and gold-plated to minimise any risk of damage and protect against corrosion.

To ensure the integrity of intrinsically safe protection levels and safeguard against non-compliant accessories being used, any accessory connected to the handset automatically undergoes a validation process.

All DTEEx accessories incorporate a robust locking connector to further safeguard the user.



## Model List

Model	Approval	Channels	EU/Non EU	Screen	RFPower	Frequency	Tier
DT522	IECEEx IIA	16	Non EU	None	4W	VHF	II
DT525	IECEEx IIA	99	Non EU	OLED	4W	VHF	II
DT582	IECEEx IIA	16	Non EU	None	4W	UHF	II
DT585	IECEEx IIA	99	Non EU	OLED	4W	UHF	II
DT822	ATEX IIA	16	EU	None	4W	VHF	II
DT825	ATEX IIA	99	EU	OLED	4W	VHF	II
DT882	ATEX IIA	16	EU	None	4W	UHF	II
DT885	ATEX IIA	99	EU	OLED	4W	UHF	II
DT922	ATEX IIC	16	EU	None	1W	VHF	II
DT925	ATEX IIC	99	EU	OLED	1W	VHF	II
DT982	ATEX IIC	16	EU	None	1W	UHF	II
DT985	ATEX IIC	99	EU	OLED	1W	UHF	II
DT952	ATEX IIC	16	EU	None	0.5W	PMR/DMR446	I
DT953	ATEX IIC	99	EU	OLED	0.5W	PMR/DMR446	I
DT982U	ATEX IIC	16	Non EU	None	1W	UHF upband	II
DT985U	ATEX IIC	99	Non EU	OLED	1W	UHF upband	II
DT985U/CB	ATEX IIC	99	Non EU	OLED	1W	UHF upband	II

## Key Features

- ✓ Commercial grade construction
- ✓ IP68 submersible
- ✓ Digital & analogue modes
- ✓ Outstanding range and performance
- ✓ Simple end-user programming app
- ✓ Extensive range of approved accessories
- ✓ Supports 3rd party BA kit

- ✓ Audio accessory optimisation
- ✓ AES 256 encryption (licenced option)
- ✓ IP Multi Roaming (licenced option)
- ✓ Lone worker & Man down (option)
- ✓ Personal attack button
- ✓ Locking accessory connector
- ✓ Transmit text messaging

# Technical Specification

General			
Vocoder	AMBE+2™		
Battery	DT800/DT900 CNB950EV2 1800mAh Lithium-Ion DT500 CNB550EV2 1800mAh Lithium-Ion		
Weight	435g		
Overall Dimensions (HxWxD)	138mm x 60mm x 38mm (with CNB950EV2)		
Frequency Stability	±0.5ppm		
Frequency Range	VHF	136-174 MHz	
	UHF	400-470 MHz	
	UHF UP-BAND	450-520 MHz	
	PMR446	446-446.2 MHz	
Number of Channels	16 (non-display) / 99 (display)		
Number of Zones	8 (display)		
Channel Spacing	12.5 & 25KHz		
Operating Voltage	7.4v		
Programmable Buttons	3 (non-display) / 5 (display)		
Battery Endurance (5/5/90)	<b>Model</b>	<b>Analogue mode</b>	<b>Digital mode</b>
	DT925	16 hours	18 hours
	DT825/525	10 hours	15 hours
	DT985	16 hours	18 hours
	DT885/585	10 hours	15 hours
	DT953	16 hours	18 hours
	DT985U	16 hours	18 hours
*non display models have improved duty cycle of 15%			
Transmitter			
Output Power	ATEX IIC	1 Watt (100mW versions available)	
	ATEX/IECEX IIA	4 Watts (high) / 1 Watt (low)	
	PMR446	0.5 Watt	
Modulation Limiting	±5.0KHz / ±2.5KHz		
Unwanted Emissions	-57dBm up to 1GHz, -47dBm from 1GHz to 4GHz		
Adjacent Channel Power	-60dBc		
Audio Distortion	<5%		

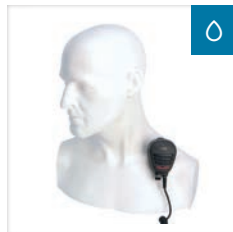
Receiver	
Sensitivity (Typical)	Analogue -121dBm (0.2uV) for 12dB SINAD Digital -121dBm (0.2uV) for 5% BER
Intermodulation Response	>65dB
Adjacent Channel Selectivity	>70dB / >60dB
Spurious Rejection	>70dB
Rated Audio Power	2 Watts
Audio Distortion	<5%
Conducted Spurious Emissions	-57dBm up to 1GHz, -47dBm from 1GHz to 4GHz
Environmental	
Operating Temperature	-20°C to +40°C
Storage Temperature	-40°C to +85°C
Thermal Shock	
Humidity	
Shock & Vibration	Compliant MIL-STD-810 C/D/E/F/G
Packing Test	
Drop Test	
Dust & Liquid Ingress	IP68 (2m 4h Submersible)
Approvals	EN 300 086 v2.1.2 EN 300 113 v2.1.1 & v3.1.1 EN 301 489-1 v2.2.3 & EN 301 489-5 v2.2.1 EN 62368-1:2020 + A11:2020 EN 50566:2017, EN 62311:2008 & EN 62209 – 2:2010 EN 300 296 v2.1.1
Ex Protection	ATEX II 2G Ex ib IIA T4 Gb ATEX II 2G Ex ib IIC T4 Gb Ex ib IIA T4 Gb

## Accessories

Supplied package includes: Li-ion battery pack, drop-in charger, belt clip, high-efficiency antenna and quick-start user guide.



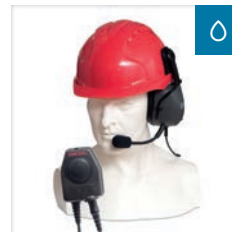
**CSBHT**  
Intelligent six-pod rapid charger



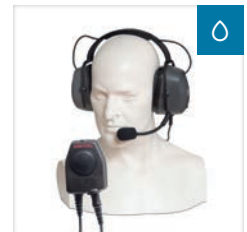
**CMP/DT9** Heavy-duty speaker microphone for DT900 and DT800 series  
**CMP/DT5** for DT500 series



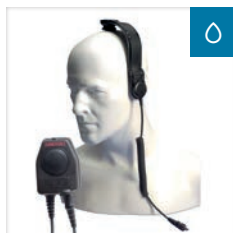
**CLCDT2 – non-display**  
**CLCDT5 – display**  
A heavy-duty leather carry case with swivel belt loop and strap



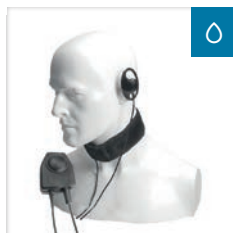
**CHPHS/DT9\***  
Single-sided ear defender headset for hard hat use



**CHPD/DT9\***  
Double-sided ear defender headset with headband




**CXR5/DT9**  
Bone conductive skull mic with in-line PTT



**CXR16/DT9**  
Throat mic/headset with heavy-duty PTT



**3rd Party BA**  
Supports 3rd party BA comms kits

 Submersible products are represented with a water droplet.

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

\* Submersible - PTT only

Full list of accessories available online.

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