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

entel.co.uk/dtex-land

DTEx Series

Intrinsically Safe Commercial-Grade Land portables

The ultra-durable DTEx series is the latest addition to our range of Intrinsically Safe radios. The rugged DTEx 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 DTEx 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 DTEx can be depended on to withstand the most extreme and hostile environments.

Customisable Configuration

The fully featured and versatile DTEx 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



Advanced screen

Superior Audio

Our DTEx portables deliver loud and crisp audio, no matter what operational environment you are in. The full DTEx 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.

Safety Features You Can Rely On

DTEx 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 DTEx 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 2 Watts EIRP 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

DTEx 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 (non-display models only)

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 19.5 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 DTEx 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 DTEx 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 DTEx accessories incorporate a robust locking connector to further safeguard the user.



Model List

Model	Approval	Channels	EU/Non EU	Screen	RFPower*	Frequency	DMR Tier
DT522	IECEx IIA	16	Non EU	None	4W	VHF	II
DT525	IECEx IIA	99	Non EU	OLED	4W	VHF	II
DT582	IECEx IIA	16	Non EU	None	4W	UHF	II
DT585	IECEx 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	2W*	VHF	II
DT925	ATEX IIC	99	EU	OLED	2W*	VHF	II
DT982	ATEX IIC	16	EU	None	2W*	UHF	II
DT985	ATEX IIC	99	EU	OLED	2W*	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	2W*	UHF upband	II
DT985U	ATEX IIC	99	Non EU	OLED	2W*	UHF upband	II
DT985U/CB	ATEX IIC	99	Non EU	OLED	2W*	UHF upband	II

* EIRP (ATEX IIC) / Conducted (all others).

Key Features

Some features are only available in DMR mode

- ✓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
- ✓Voice annunciation (non-display models only)

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) *non display models have improved duty cycle of 15%	**Model / Analogue mode / Digital mode** DT925 16.5 hours 19.5 hours DT825/525 13.5 hours 16.5 hours DT985 16.5 hours 19.5 hours DT885/585 13.5 hours 16.5 hours DT953 16.5 hours 19.5 hours DT985U 16.5 hours 19.5 hours

Transmitter	
Output Power	ATEX IIC 2 Watts EIRP 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	Compliant MIL-STD-810 C/D/E/F
Humidity	
Shock & Vibration	
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, 50566:2017+A1:2023 EN 62209-2:2010, IEC 62209-2:2010+AMD1:2019 EN 62311:2020 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/DT9S
– simple version
CMP/DT9E
– with earpiece socket
Heavy duty speaker microphone



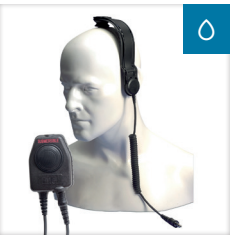
CLCDT2 – non-display
CLCDT5 – display
A heavy-duty leather carry case with swivel belt loop and strap



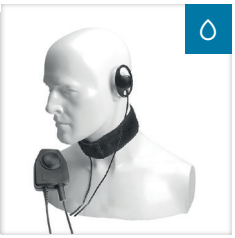
CHPHS/DT9*
Single-sided ear defender headset for hard hat use



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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Contact

Designed in the United Kingdom

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