Business
Critical
Communications

Entel

DTEx Series

Intrinsically Safe 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 mode
- Submersible IP68



Tough | CRYSTAL CLEAR AUDIO
Submersible
Dependable

www.entel.co.uk/dtex

DTEx Series

Intrinsically Safe 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 and the ergonomic controls are specifically designed for gloved hand use. By combining the latest DMR digital technology with 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-meters 4-hours) the fully submersible DTEx can be depended on to withstand the most extreme and hostile of environments.

Simple to Advanced Configuration

The fully featured and versatile DTEx radios can be configured for simple press to talk operation or the more advanced features that you'd expect of a high tier two way radio. You can even customize the hi-contrast OLED display to show either basic large character display or more detailed information.



Simple screen



Advanced screen

Superior Audio

Using the latest noise reduction technology Entel's DTEx portables deliver loud & crisp audio no matter what environment you are in. All of the DTEx range of accessories incorporate a robust locking plug and high-grade cable and benefit from Entel's proprietary "Smart Speech Tailoring" technology. This automatically detects the type of accessory connected and optimizes the audio accordingly to deliver the very best performance.

Safety Features You Can Rely On

DTEx radios support Digital mode Lone-Worker, Man-Down* and Emergency Button features with call interrupt. This, dealer programmable, 3 levels of safety ensures an alarm is raised as soon as is possible (even if the channel is already busy).
*optional



Non display model



Display model

IP68 2 Metres, 4 Hours Submersible

The DTEx Series offers the highest submersibility rating of any manufacturer. This protects against corrosion, withstanding total immersion in water to a depth of 2 metres for 4 hours to protect against the likely hazards encountered in wet environments.

Intrinsically Safe

ATEX Approved IIC - The DT900 series of ATEX certified portables meet IIC T4 - the most stringent ATEX ratings as per EU directive 94/9/EC.

ATEX Approved IIA - For those 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 those users who do not need to comply with the European ATEX standard. (Outside Europe).



DTEx Series

Intrinsically Safe Land Portables

Migrate to Digital Your Way

DTEx radios utilize 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.

Intelligent Batteries, Audio Accessories & BA Support

Entel's intelligent batteries and accessories are designed to deliver optimum performance and safety. In Digital mode the battery endurance on DT900 radios is more than 18.5 hours from a single charge!

A vast range of Entel original audio accessories is available from a simple earpiece to bone conductive options for extremely high noise environments. In addition, 3rd party Breathing Apparatus comms kits are also supported.

Entel's Sure Speech™ 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

With Entel's unique and simple to use FREE PC app there is no longer any need for a user to return a handset to their dealer to re-program or update. With the user friendly app you can simply transfer programming data, 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 IS protection levels any accessory connected to the handset automatically undergoes a validation process to safeguard against non-compliant accessories being used.

All DTEx accessories incorporate a robust locking connector to further safeguard the safety of the user.



Key Features

- ✓Commercial grade construction
- ✓IP68 submersible
- ✓Digital and analogue modes
- ✓Outstanding range & performance
- ✓Crystal clear audio
- ✓High contrast white on black OLED
- ✓Simple end user programming app
- ✓Extensive range of approved accessories
- ✓Supports 3rd party BA kit
- ✓Audio accessory optimisation



Model List

Model	Approval	Channels	EU/Non EU	Screen	RFPower	Frequency
DT522	IECEx IIA	16	Non EU	None	4W	VHF
DT525	IECEx IIA	64	Non EU	OLED	4W	VHF
DT582	IECEx IIA	16	Non EU	None	4W	UHF
DT585	IECEx IIA	64	Non EU	OLED	4W	UHF
DT822	ATEX IIA	16	EU	None	4W	VHF
DT825	ATEX IIA	64	EU	OLED	4W	VHF
DT882	ATEX IIA	16	EU	None	4W	UHF
DT885	ATEX IIA	64	EU	OLED	4W	UHF
DT922	ATEX IIC	16	EU	None	1W	VHF
DT925	ATEX IIC	64	EU	OLED	1W	VHF
DT982	ATEX IIC	16	EU	None	1W	UHF
DT985	ATEX IIC	64	EU	OLED	1W	UHF
DT952	ATEX IIC	16	EU	None	0.5W	PMR/DMR446
DT953	ATEX IIC	64	EU	OLED	0.5W	PMR/DMR446

Why digital?

- **Better coverage**
- **Significantly louder and clearer audio**
- **Longer battery life, longer duty cycles**
- **Far superior privacy**

DMR is split into three types of service, from short-range license free to National I International connected networks:

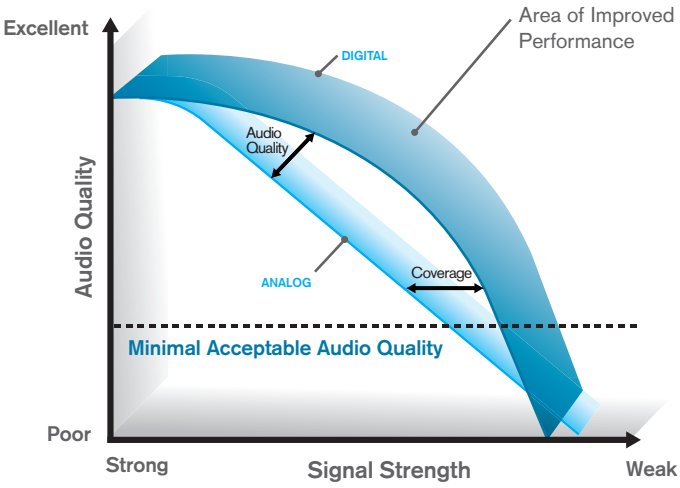
Tier 1 - Tier 1 is for commercial and leisure use with direct mode operation (no repeaters allowed), fully approved for use within Europe and no license is required.

Tier 2 - Tier 2 is for small to medium size licensed systems. Radios can be used in direct mode or with a repeater if significantly extended range is required. Tier 2 repeaters can be networked to increase the coverage area even further.

Tier 3 - Tier 3 is for medium to large size licensed systems. 'Trunked' repeaters are used giving automatic access to multiple Channels which may be extended and networked to support very large numbers of radios or coverage areas.

Double the Channels

Using two slot simplex the DTEx radios split each channel in two, delivering double the number of Digital Channels at no extra cost. For example, if you are using a single analogue channel, the same channel in digital mode will yield two channels.





Technical Specification

General		
Vocoder	AMBE+2™	
Battery	DT800/DT900 CNB950E 1800mAh Lithium-Ion DT500 CNB550E 1800mAh Lithium-Ion	
Weight	435g	
Overall Dimensions (HxWxD)	138mm x 60mm x 38mm (with CNB950E)	
Frequency Stability	± 1.5ppm	
Frequency Range	VHF UHF UHF UP-BAND PMR446	136-174 MHz 400-470 MHz 450-520 MHz 446-446.2 MHz
Number of Zones	8	
Number of Channels	16 (non-display) / 64	
Analogue Channel Spacing	12.5/20/25KHz	
Digital Channel Spacing	12.5KHz	
Operating Voltage	7.4v	
Programmable Buttons	3 (non-display) / 5	
Battery Endurance (5/5/90 duty cycle @ 1W)	Analogue Digital	14.5 hours 18.5 hours
Transmitter		
Output Power	ATEX IIC ATEX/IECEx IIA	1 Watt 4 Watts (high) / 1 Watt (low)
Modulation Limiting	±2.5kHz @ 12.5kHz ±4.0kHz @ 20kHz ±5.0kHz @ 25kHz	
Conducted / Radiated Spurious Emissions	Better than -36dBm	
Adjacent Channel Power	Better than 60dB	
Audio Distortion (typical)	3%	

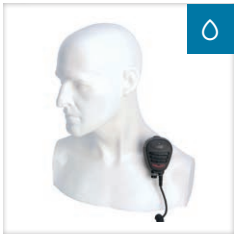
Receiver	
Sensitivity (typical)	Analogue -121dBm (0.2uV) for 12dB SINAD Digital -121dBm (0.2uV) for 5% BER
Intermodulation response rejection (ETSI)	> 70dB
Adjacent Channel Selectivity (ETSI)	> 70dB(12.5KHz) 60dB(25KHz)
Spurious Response Rejection (ETSI)	> 70dB
Audio Output Power	2-Watts
Audio Distortion (typical)	3%
Conducted Spurious Emission (ETSI)	> -57dBm
Environmental	
Operating Temperature	-20°C to +55°C
Storage Temperature	-40°C to +85°C
Thermal Shock	MIL-STD-810 C/D/E/F/G
Humidity	
Shock & Vibration	
Packing Test	
Drop Test	
Dust & Liquid Ingress	IP68 (2m 4h Submersible)
Approvals	Analogue mode RF EN 300 086 v2.1.2 Digital mode RF EN 300 113 v2.2.1 EMC EN 301 489-1 v2.2.0 & EN 301 489-5 v2.2.0 Safety (LVD) EN 60950-1:2006/ A11:2009:A1:2010/A12:2011/A2:2013 SAR EN 50566:2017, EN62311:2008 & EN 62209-2:2010
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, rapid charger, belt clip, high-efficiency antenna and quick-start user guide.



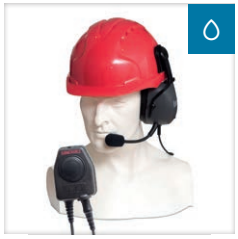
CSBHT
Intelligent Six-Pod rapid charger



CMP950/DT Heavy duty Speaker Microphone for DT900 and DT800 series
CMP550/DT for DT500 series



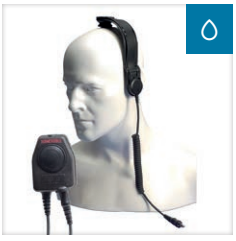
CLC952/DT
A heavy duty leather carry case with belt loop and strap



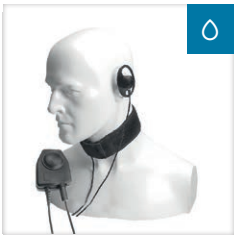
CHP950HS/DT*
Single sided ear defender headset for hard hat use



CHP950D/DT*
Double sided ear defender headset with headband



CXR5/950/DT*
Bone conductive skull mic with in-line PTT



CXR16/950/DT*
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

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Contact

For more information about our products, please contact us:
Entel UK, 320 Centennial Avenue Centennial Park, Elstree, Borehamwood, Hertfordshire WD6 3TJ, United Kingdom

+44 (0)20 8236 0032 info@entel.co.uk entel.co.uk