Business
Critical
Communications

Entel

DTEx Series

Intrinsically Safe Commercial Marine Portables

- EN60945 Marine Approval
- ATEX II 2G Ex ib IIB T4 Gb
  ATEX II 2G Ex ib IIC T4 Gb
- Ex ib IIB T4 Gb
- Digital & analogue modes
- Submersible IP68

0558

Tough | CRYSTAL CLEAR AUDIO

Submersible

Dependable

entel.co.uk/dtex-marine

DTEx Series

Intrinsically Safe Commercial Marine Portables

Available in either VHF or UHF display and non-display models, the industrial grade DTEx Series sets the benchmark for next-generation onboard intrinsically safe portables.

Standard features include both analogue and digital* modes of operation, high visibility OLED display, high torque ergonomic controls designed for gloved-hand use, and industry-leading IP68 2m 4 hours submersible rating, to provide 100% reliability and usability even in the most extreme conditions.

Loud and Clear Audio

Our DTEx Series delivers loud and intelligible audio, essential when working in high ambient noise environments. The accessory range incorporates a robust locking plug, high-grade cable and intelligent speech tailoring technology that automatically optimises the audio for the type of accessory connected, always ensuring the best performance.

IP68 2 Metres, 4 Hours Submersible

The DTEx Series delivers a class-leading IP68 2 metres for 4 hours submersible rating, the highest IP rating of any manufacturer. This rating ensures protection against corrosion and likely hazards encountered in life at sea.

Intrinsically Safe Approved

ATEX Approved IIC - The DT900 Series of ATEX certified portables meet the IIC gas group, the most stringent ATEX rating as per EU Directive 2014/34/EU.

ATEX Approved IIB - The DT800 Series of ATEX certified portables meet IIB gas group.

IECEx Approval IIB - The DT500 range of intrinsically safe certified portables are suitable for those users who do not need to comply with the European ATEX standard.

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.

Informative display on UHF model shows both the channel number and the frequency

VHF display shows the channel name and number

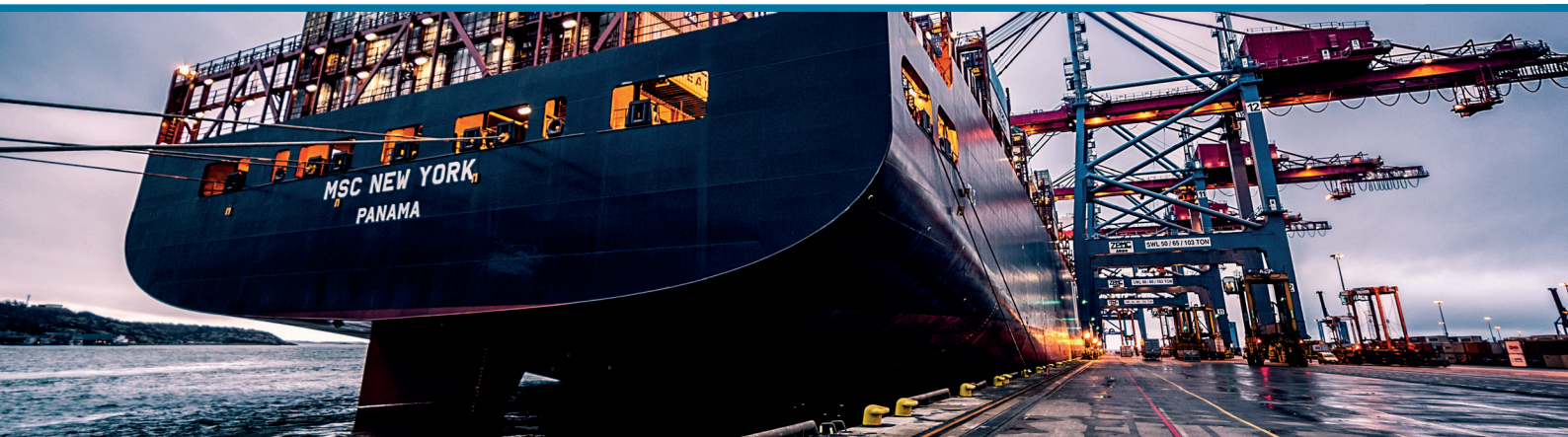
Non-display model

UHF model

VHF model

Easily Reprogram your radios …even at sea!

With our free, unique and simple-to-use PC app, you can easily reprogram a DTEx radio whilst still onboard. The user-friendly app makes it easy to drag and drop a new programming file, sent from your Entel Dealer by email, to your DTEx radio(s). This simple and intuitive process can be carried out by non-technical personnel.



Benefits of Digital

Aside from the exceptional audio you will also benefit from increased usable range with no degradation of quality or interference. There are two digital modes 6.25kHz Digital and DMR (see table below) DTEx Series can uniquely be programmed to operate in either of the digital modes or analogue mode. Digital operation is only approved for use on the UHF marine band.

Mode	Vessel Flag	VHF or UHF
Analogue	EU and non-EU	VHF or UHF
6.25kHz Digital	EU and non-EU	UHF
DMR Digital	non-EU	UHF

Industrial Grade Construction

Every aspect of the DTEx radio industrial grade design has been meticulously considered, from the high contrast OLED display, readable in all light conditions to the high torque controls to the ultra-tactile front buttons that ensure reliable operation even when using gloved hands.

Intelligent Batteries

Entel's intelligent Lithium-ion batteries are designed to deliver optimum performance and safety. In digital mode, the duty cycle of the DT900 radios is more than 19.5 hours from a single charge!

Extensive range of accessories

From headsets to speaker microphones and advanced bone conduction technology, Entel offers a complete portfolio of accessories to ensure you stay connected.

High-Grade Accessory Interface

The rugged, multi-pin interface and Micro-USB socket are 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 usage, any accessory connected to the handset automatically undergoes a validation process.

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

Model List - VHF

Model	Gas Group	Frequency	MER UK Approved	EU/ Non EU	Display/ Non-display	Analogue/ Digital	RF power	ATIS (Optional)
DT944	ATEX IIC	VHF	Yes	EU	Display	Analogue	1 Watt	Yes
DT942	ATEX IIC	VHF	Yes	EU	Non	Analogue	1 Watt	No
DT844	ATEX IIB	VHF	Yes	EU	Display	Analogue	4 Watts	Yes
DT842	ATEX IIB	VHF	Yes	EU	Non	Analogue	4 Watts	No
DT544	IECEx IIB	VHF	No	Non EU	Display	Analogue	4 Watts	No
DT542	IECEx IIB	VHF	No	Non EU	Non	Analogue	4 Watts	No

Model List - UHF

Model	Gas Group	Frequency	MER UK Approved	EU/ Non EU	Display/ Non-display	Analogue/ Digital	RF power
DT985M	ATEX IIC	UHF	Yes	EU	Display	Analogue & Digital	1 Watt
DT982M	ATEX IIC	UHF	Yes	EU	Non	Analogue & Digital	1 Watt
DT885M	ATEX IIB	UHF	Yes	EU	Display	Analogue & Digital	2 Watts ERP
DT882M	ATEX IIB	UHF	Yes	EU	Non	Analogue & Digital	2 Watts ERP
DT585M	IECEx IIB	UHF	No	Non EU	Display	Analogue & Digital	2 Watts ERP
DT582M	IECEx IIB	UHF	No	Non EU	Non	Analogue & Digital	2 Watts ERP

Key Features

Some features are only available in DMR mode

- ✓Industrial marine grade construction
- ✓IP68 submersible
- ✓Digital & analogue modes
- ✓Outstanding range and performance
- ✓Simple onboard reprogramming app
- ✓Extensive range of approved accessories
- ✓Supports 3rd party BA kit
- ✓Audio accessory optimisation
- ✓IP Multisite Roaming (digital mode only licenced option)
- ✓Locking accessory connector
- ✓Voice annunciation (non-display models only)
- ✓ATIS (variant option)

Technical Specification

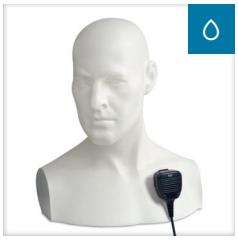
General		
Frequency Range	VHF UHF	156-163MHz 450-470MHz
Channel Spacing	6.25, 12.5 & 25kHz	
Operating Voltage	7.4V	
Weight	435g	
Overall Dimensions (HxWxD)	138mm x 60mm x 38mm	
Channels Channels non-display version	VHF UHF	INT/USA/CAN mode plus private up to 99 up to 16
Battery Endurance (5/5/90) *non-display models have improved duty cycle of 15%	**Model** DT944 DT844/544 DT985 DT885/585	**Analogue/6.25kHz** 16.5 hours 13.5 hours 16.5 hours 16.5 hours	**DMR** n/a n/a 19.5 hours 19.5 hours
Transmitter		
Output Power UHF	ATEX IIC ATEX IIB	1 Watt 2 Watts ERP
Output Power VHF	ATEX IIC ATEX IIB	1 Watt 4 Watts

Receiver	
Sensitivity (Typical)	Analogue -116dBm (0.35uV) for 12dB SINAD Digital -116dBm (0.35uV) for 5% BER
Environmental	
Operating Temperature	-20°C to +40°C
Storage Temperature	-40°C to +85°C
Thermal Shock	Compliant MIL-STD810 C/D/E/F
Humidity	
Shock & Vibration	
Packing Test	
Drop Test	
Water Ingress	IP68 2 metres, 4 hours submersible
Approvals	EN 301 178 v2.2.2 EN 300 720 v2.1.1 EN 300 113 v2.2.1 EN 301 843-1 v2.2.1 EN 301 843-2 v2.2.1 EN 301 489-1 v2.2.3, EN 301 489-5 v2.2.1 EN 60945:2002, 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
Ex Protection	ATEX II 2G Ex ib IIB T4 Gb ATEX II 2G Ex ib IIC T4 Gb IECEx Ex ib IIB 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

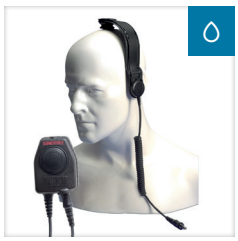


CMP/DT9S
– simple version
CMP/DT9E
– with earpiece socket
Heavy duty speaker microphone

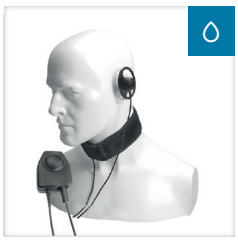
CLCDT2 – non-display
CLCDT5 – display
A heavy duty leather carry case with swivel belt loop and strap

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 heavy duty PTT



CXR16/DT9*
Throat mic / earpiece 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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