Business
Critical
Communications

Entel

DX-IS Series

Intrinsically Safe, Commercial Land Portables

- Entry & Advanced models
- UL913 Intrinsically Safe Certified
- DMR Digital & Analogue modes
- Submersible IP68

Tough | CRYSTAL CLEAR AUDIO
Submersible
Dependable

DX-IS Series

Intrinsically Safe, Commercial Land Portables

The commercial grade DX-IS Series offers 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 excellent reliability and usability even in the most extreme conditions. Whether you need a basic entry level radio or advanced digital features our DX-IS Series models deliver smart solutions, helping you to increase productivity and keep your business connected.

Loud and Clear Audio

Using the latest noise reduction technology, our DX-IS portables deliver best in class, loud and intelligible audio, essential when working in high ambient noise environments.

IP68 2 Metres, 4 Hours Submersible

The DX-IS Series delivers a class leading IP68 2 metres for 4 hours submersible rating, the highest IP rating of any manufacturer. This ensures protection against corrosion and other physical hazards encountered, no matter the environment.

Intrinsically Safe Approved

Approved and certified to UL913, for users who do not need to comply with the European ATEX directive.

Commercial Grade Construction

Every aspect of the DX-IS radios commercial 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 ensures reliable operation even when using gloved hands.

Voice Annunciation

This programmable feature gives further assurance to the user that they've selected the correct channel allowing them to focus on the task in hand.

Benefits of Digital

Aside from crystal clear intelligible audio, there is increased range and battery endurance. DX-IS also supports analogue mode ensuring backwards compatibility with any existing analogue radios.

Informative, high readability, OLED displays:

Basic screen

Advanced screen

Non display model

Display model

Migrate to Digital Your Way

DX-IS radios support both analogue and 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

Entel's intelligent Lithium-ion batteries are designed to deliver optimum performance and safety. In digital mode the DX-IS radio has a market leading duty cycle of 21 hours from a single charge.

Versatile Range of Accessories

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

Simple End-User Programmer App

With Entel's unique user-friendly app there is no longer any need for a dealer to visit on site (or have the radios returned) to re-program or update customers' radios. Using Entel's free PC app, anyone can simply transfer programming data, software updates or add new features to their DX radios:

Step 1. The dealer emails the app and a 'Fleet File' to his customer.

Step 2. The customer runs the app and then drags and drops the 'Fleet File' into the app.

Step 3. The customer connects the radios to the PC (via a standard Micro-USB lead) and the semi-automated wizard programmer app takes care of everything else.
See video @ entel.co.uk/dx-prog

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 and safeguard against non-compliant accessories being used, any accessory connected to the handset automatically undergoes a validation process. All DX-IS accessories incorporate a robust locking connector to further safeguard the user.

Model List - VHF

Model	Gas Group	Frequency	Display / Non display	Analogue / Digital	RF power
DX522-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	VHF	Non	Analogue & Digital	1 & 5 watts
DX525-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	VHF	Display	Analogue & Digital	1 & 5 watts

Model List - UHF

Model	Gas Group	Frequency	Display / Non display	Analogue / Digital	RF power
DX582-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	UHF	Non	Analogue & Digital	1 & 4 watts
DX585-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	UHF	Display	Analogue & Digital	1 & 4 watts
DX582U-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	UHF upband	Non	Analogue & Digital	1 & 4 watts
DX585U-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	UHF upband	Display	Analogue & Digital	1 & 4 watts
DX446E-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	PMR446	Non	Analogue & Digital	0.5 watts
DX446L-IS	Class I, II, III, Division 1, Groups C-G, T4, Class I, Division 2, Groups A-D, T4	PMR446	Display	Analogue & Digital	0.5 watts

Key Features

- ✓Commercial grade construction
- ✓IP68 submersible
- ✓Digital and analogue modes
- ✓Outstanding range and performance
- ✓Crystal clear audio
- ✓High contrast white on black OLED
- ✓Simple End User programming App
- ✓Extensive range of approved accessories
- ✓Audio accessory optimisation

Technical Specification

General		
Frequency Range	VHF UHF UHF UP-BAND PMR446	136-174MHz 400-470MHz 450-520MHz 446-446.2MHz
Channel Spacing	12.5KHz & 25KHz	
Operating Voltage	7.6v	
Battery	CNB450E-IS 2200mAh Lithium-ion	
Weight	Display model 269g Non display model 259g	
Overall Dimensions (HxWxD)	97mm x 59.5mm x 37mm (with CNB450E-IS)	
Channels display version Channels non display version	99 16	
Battery Endurance (5/5/90)	**Model** DX522/525 DX582/585	**Analogue mode** 15 hours 15 hours	**Digital mode** 21 hours 21 hours

Transmitter	
Power Output VHF (HI/LOW)	5W/1W
Power Output UHF (HI/LOW)	4W/1W
Power Output PMR446/DMR446	0.5W
Audio Distortion	<5%
Unwanted Emission	-57dBm up to 1GHz, -47dBm from 1GHz to 4GHz
Adjacent Channel Power	-60dBc

Receiver	
Digital Sensitivity	Typically -121dBm (0.2uV) for 5% BER
Analogue Sensitivity	Typically -121dBm (0.2uV) for 12dB Sinad
Rated Audio Output	2 watts
Intermodulation Response	>65dB
Adjacent Channel Selectivity	>70dB / >60dB
Spurious Rejection	>70dB
Audio Response	300Hz to 3KHz -6dB/Octave
Audio Distortion	<5%
Conducted Spurious Emissions	-57dBm up to 1GHz, -47dBm from 1GHz to 4GHz

Environmental	
Operating Temperature	-20°C to +55°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

For sale outside of Europe only.

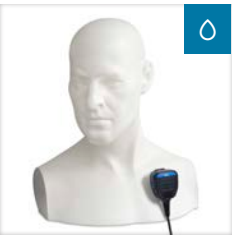
Intrinsically Safe Certified to UL913 by SGS:
- ANSI/UL913 5th Ed
- Class I,II,III, Division 1, Groups C-G, T4
- Class I, Division 2, Groups A-D, T4

UL913		
Atmosphere	Class I II III	Class I – Gas, vapors; Class II – Dust; Class III – Fibers, Flyings
Area Classification (Flammable material present time)	DIV I	Division 1: Gas/Dust normally present in explosive amounts
Gas Types by Group:	Group C	C – Ethylene and related products
Dust Types by Group:	Group G	G – Grain and non-metallic dust
Operating Temperature	-20 to 55	-22°F to 131°F
Temperature Class (Maximum device surface temperature)	T4	135°C

Accessories

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

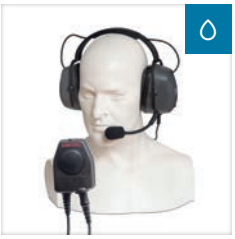
CSBHX
Intelligent six-pod rapid charger



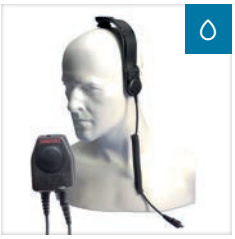
CMP/DXS-IS
– simple version
CMP/DXE-IS
– with earpiece socket
Heavy duty speaker microphone

CLCDX2 – non display
CLCDX5 – display
A heavy duty leather carry case with swivel belt loop and strap

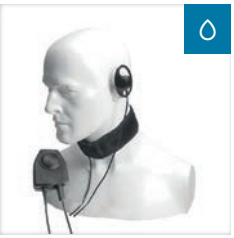
CHP450HS/DX*
Single sided ear defender headset for hard hat use



CHP450D/DX*
Double sided ear defender headset with headband



CXR5/DX*
Bone conductive skull mic with heavy duty PTT



CXR16/DX*
Throat mic / earpiece with heavy duty PTT

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.

V2.0 All Rights Reserved. Copyright Entel UK Ltd.

Contact

Designed in the United Kingdom

For more information about our products, please contact us:
LRS UK, Link House, 1880 Leek Road, Stoke on Trent, Staffordshire, ST2 7AH, United Kingdom

+44(0)1782 537000 bestwalkietalkie.com

Entel