# **Technical Specification**

reer mean ope	
General Specification	
Frequency range VHF	156 to 163.275MHz (INT, USA. CAN)
Frequency range UHF	400 to 470MHz
Frequency range UHF UP Band	450 to 520MHz
Channel Spacing	VHF – 25KHz UHF – 25KHz / 12.5KHz
Operating Voltage	7.4V
Battery	Li-Ion 2000mAh (1800mAh ATEX & IECEx)
Weight (with battery)	277g
Dimensions*	130mm (h) x 59.5mm (w) x 37mm (d)
Frequency Stability	2.5ppm
Operating Temperature	-20 to +55°C
Dust and Liquid Intrusion	IP68 sumbersible 2 metres for 4 hours
Drop, Packing, Vibration & Shock	MIL-STD 810 C/D/E/F

<sup>\*</sup> Dimensions are based upon a radio with an attached battery, excluding knobs, antenna and protrusions.

For a full & detailed specification, please visit our website

Ω		Transmitter			
	156 to 163.275MHz (INT, USA. CAN)	Power Output VHF (HI/LOW)	5W / 1W		
	400 to 470MHz	Power Output UHF (HI/LOW)	4W / 1W		
UP Band	450 to 520MHz	Power Output ATEX IIC	1W		
	VHF – 25KHz UHF – 25KHz / 12.5KHz	Power Output ATEX IIA (HI/LOW)	4W / 1W		
		Power Output IECEx (HI/LOW)	4W / 1W 8K0G3E / 16K0G3E (12.5 / 25KHz)		
	7.4V	Modulation Type			
	Li-lon 2000mAh	OmAh ATEX & IECEx)  Receiver	,		
	(1800mAh ATEX & IECEx)	Receiver			
	277g	Sensitivity	Better than -118dBm 12dB Sinad		
	130mm (h) x 59.5mm (w) x 37mm (d)	Rated Audio Output	1W		
	2.5ppm	Intermodulation	-42dBm		
е	-20 to +55°C	Adjacent Channel Selectivity	60 / 70 (12.5 / 25KHz)		
ion	IP68 sumbersible 2 metres for 4 hours	Spurious Response Rejection	-37dBm		
on & Shock	MIL-STD 810 C/D/E/F	Spurious Radiations	2.0nW/20nW <1GHz/>1GHz		

## Accessories

Supplied package includes:

2000mAh Li-Ion battery pack, charger, spring loaded belt clip, high efficiency antenna & quick start user guide (ATEX models are supplied with an 1800mAh 7.4v Li-Ion Battery)

HT649 GMDSS can be supplied in different package combinations, please consult your dealer.



**CSBHT** ■ Six-way charger



CMP750 ■ CMP950 ▲ Heavy duty speaker mic



EA12/750 EA12/950 A Earpiece microphone



EA15/750 EA15/950 A Covert earpiece / microphone



CXR16/750 ■ CXR16/950 ▲ Throat mic. Bone conductive



CXR5/750 ■ CXR5/950 ▲ Skull mic. Bone conductive



CXE19/750 ■ Bone conductive both transmit & receive



CHP750HS ■ CHP950HS ▲ Hard hat eardefender. submersible PTT





epresented with a water droplet

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

Not intrinsically safe.

▲ Intrinsically safe. ⟨Ex⟩ @

# HT Series Marine **Business Critical Communications**



**Commercial Grade Construction** 



**MED Approved** 



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



Ex ib IIA T4 Gb

Tough | IP68 RATING Submersible Dependable



### Contact

For more information about our products please contact us:

# **ENTEL HT SERIES** Marine

**Commercial Marine Portable Radios** 

Rugged, designed for gloved hand use and with exceptionally loud audio, Entel's HT Commercial Marine portable radios are specifically designed to withstand the everyday rigours of the Maritime workplace.

With over 20-Years' experience exceeding the demands of the Maritime Workplace, Entel offers the most complete and established range of Commercial Marine portable radios available. Versions include: VHF, UHF, GMDSS, ATIS & Intrinsically Safe (ATEX IIA, IIC & IECEx).

# Why Entel HT Commercial Marine portables?

Superior voice quality and volume

IP68 (2 metres depth for 4 hours) submersible

MIL-STD 810/C/D/E&F standard robust construction

High capacity (2000 mAh) Li-Ion batteries as standard

Established & proven portables based on over 20-Years' experience

#### **Superior Audio**

Using the latest compander noise reduction technology, Entel's Commercial Marine portables deliver loud & crisp audio no matter what environment you are in.

#### **Commercial Grade Construction**

Exceeding MIL-STD 810C/D/E/F rating, the HT Series 2.0 is designed to withstand shock, vibration, dust and moisture, ensuring a tough enduring performance and many years of trouble free use, even in the most hostile environments.

#### **Intelligent Li-Ion Battery**

Entel's Lithium-Ion Batteries provide the following key advantages:

**Extended Talk Time** – The 2000mAh capacity of Entel's Lithium-Ion batteries is up-to double that of other makes, therefore ensuring maximum talk-time.

**Li-lon Chemistry** – Entel's Li-lon batteries are not prone to the dreaded memory effect that Ni-Cad and Ni-MH battery packs suffer from. This ensures that you always have a good charge every time you take the battery from its charger.

#### 2 Metres, 4 Hours Submersible

Conforming to IP68 standard, the HT Series 2.0 offers the highest submersibility rating of any manufacturer. This unique Series 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 any field of operation.

#### **Intrinsically Safe**

**ATEX Approved IIC** - The HT900 range 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 HT800 range of ATEX certified portables meet IIA T4 with a full 4 watts of transmitter power.

**IECEx Approval** - The HT500 range of intrinsically safe certified portables are suitable for those users who do not need to comply with the European ATEX standard.

#### **GMDSS MED**

Entel's HT649 GMDSS portable is MED certified and carries the essential Wheel Mark logo. Designed for those requiring a full featured and outstandingly tough GMDSS portable, the HT649 is one of the most advanced MED certified GMDSS portables

#### The HT649 is available in two packages:

Pack 1 includes HT649 radio & Primary (emergency) battery.

Pack 2 as Pack 1 plus Secondary (rechargeable) battery and charger



				The state of the s			
			ENTRY	LCD UHF	LCD VHF	LCD VHF ATIS	LCD GMDSS
i	NOT INTRINSICALLY SAFE	VHF Marine INT/USA/CAN	HT642	_	HT644	HT644 ATIS	HT649
		Marine UHF (400 - 470MHz)	HT782	HT783	_	_	_
⟨£x⟩	ATEX IIC INTRINSICALLY SAFE	VHF Marine INT/USA/CAN	HT942	_	HT944	HT944 ATIS	_
		Marine UHF (400 - 470MHz)	HT982	HT983	_	_	_
<b>(€x</b> )	ATEX IIA INTRINSICALLY SAFE	VHF Marine INT/USA/CAN	HT842	_	HT844	HT844 ATIS	_
		Marine UHF (400 - 470MHz)	HT882	HT883	_	_	_
IECEX	IECEX INTRINSICALLY SAFE	VHF Marine INT/USA/CAN	HT542	_	HT544	_	_
		Marine UHF (400 - 470MHz)	HT582	HT583	_	_	_
	GMDSS APPROVED	VHF Marine	_	-	-	-	HT649
IP68 2 METRES FOR 4 HOURS SUBMERSIBLE		✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	
MIL-STD 810 C/D/E/F		<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	
HIGH-CAPACITY LI-ION BATTERY		<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
FLASH UPGRADABLE (TO ADD NEW FEATURES)		<b>✓</b>	<b>✓</b>	<b>/</b> *	<b>✓</b>	<b>✓</b>	
CHANNEL CAPACITY		16	255	INT/USA/ CAN	INT/USA/ CAN	INT/USA/ CAN	
PRIVATE CHANNELS		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
LOW BATTERY WARNING		<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	
CHANNEL NAMING		-	<b>/</b>	-	~	_	
VOX (HANDS FREE OPERATION)		~	<b>✓</b>	✓	✓	<b>✓</b>	

<sup>\*</sup>HT644 not flash upgradable

**Designed in the United Kingdom**