

MARINE

Entel

ATEX



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



Submersible  
Dependable  
Tough



SUBMERSIBLE

HT Series 2.0

# HT Series Features



Heavy duty locking accessory connector

Pictured: Radio with optional CSAHT rapid charger

**HT Marine Series 2.0** - Superseding the multi award-winning HT series 1.0 is a challenging task considering its success with fire brigades, petrochem, shipping and major blue chip organisations worldwide. Version 2.0 builds upon this success with a wider range of models to suit every application from simple to advanced. Built to last, the HT Series 2.0 is designed to endure the everyday rigours of life at sea.

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

**Superior Audio Quality** - The HT series 2.0 delivers loud, crisp audio using the latest compander noise reduction technology no matter what environment you are in.

**Intelligent Lithium-Ion Battery With Built In Charge Cycle Monitoring** - This very latest technology gives you four essential advantages:

- 1) For your convenience the HT Series 2.0 will count charge cycles of your battery pack, warning you when it is nearing the end of its life. Models equipped with an LCD will also display the battery charge count.
- 2) Extended duty cycle.
- 3) Not prone to the dreaded memory effect that Nicad and Ni-MH battery packs suffer from, therefore no need to fully discharge your battery pack before charging.

4) Stores a charge up to three times longer than a Nicad battery.

**Submersible** - Conforming to European IP68, the HT Series 2.0 offers the highest submergibility rating of any manufacturer. This unique series protects against corrosion, withstanding total immersion in water to a depth of 5 metres for 1 hour to protect against the likely hazards encountered in any field of operation.

**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. For full details refer to the ATEX DATA SHEET available here: [www.entel.co.uk/atex](http://www.entel.co.uk/atex)

**ATEX Approval IIA** - The HT800 range of ATEX certified portables meet IIA T4 with 4 watts RF power; for those users not restricted to the IIC 1 watt regulatory classification.

**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 Approved** - Not only fully compliant to IMO and wheel marked, the Entel GMDSS models also intrinsically safe variants with ATEX certification. Entel is the first manufacturer to offer a solution to ship owners who, quite rightly, have been demanding an intrinsically safe approved GMDSS portable for their hazardous cargo vessels. It is mandatory, by law, for hazardous cargo vessels to use intrinsically safe radios. Why should their GMDSS portables be any different?

## Model Selection:



Entry

LCD UHF

LCD VHF

LCD VHF ATIS

LCD GMDSS

⚙️ = MED approved

|                                |                             |                      |       |            |          |
|--------------------------------|-----------------------------|----------------------|-------|------------|----------|
| Not Intrinsically Safe         | Marine VHF (156-163.275MHz) | HT642                | HT644 | HT644 ATIS | HT649 ⚙️ |
|                                | Marine UHF (400 - 470MHz)   | HT782                | HT783 |            |          |
|                                | Land                        | See Land Brochure    |       |            |          |
|                                | PMR446                      | See PMR446 Brochure  |       |            |          |
|                                | MPT1327                     | See MPT1327 Brochure |       |            |          |
| IECEx<br>Intrinsically Safe    | Marine VHF (156-163.275MHz) | HT542                | HT544 |            |          |
|                                | Marine UHF (400 - 470MHz)   | HT582                | HT583 |            |          |
|                                | Land                        | See Land Brochure    |       |            |          |
|                                | MPT1327                     | See MPT1327 Brochure |       |            |          |
| ATEX IIC<br>Intrinsically Safe | Marine VHF (156-163.275MHz) | HT942                | HT944 | HT944 ATIS |          |
|                                | Marine UHF (400 - 470MHz)   | HT982                | HT983 |            |          |
|                                | Land                        | See Land Brochure    |       |            |          |
|                                | PMR446                      | See PMR446 Brochure  |       |            |          |
|                                | MPT1327                     | See MPT1327 Brochure |       |            |          |
| ATEX IIA<br>Intrinsically Safe | Marine VHF (156-163.275MHz) | HT842                | HT844 | HT844 ATIS |          |
|                                | Marine UHF (400 - 470MHz)   | HT882                | HT883 |            |          |
|                                | Land                        | See Land Brochure    |       |            |          |
|                                | MPT1327                     | See MPT1327 Brochure |       |            |          |



Entry

LCD UHF

LCD VHF

LCD VHF ATIS

LCD GMDSS

### General Features

|  |    |     |               |               |               |
|--|----|-----|---------------|---------------|---------------|
| Environmental protection to IP68 (submersible - 5m for 1 hour) | ✓  | ✓   | ✓             | ✓             | ✓             |
| MIL STD 810C/D/E/F   | ✓  | ✓   | ✓             | ✓             | ✓             |
| 1800mAh Li-Ion battery   | ✓  | ✓   | ✓             | ✓             | ✓             |
| Flash upgradeable to add future features                       | ✓  | ✓   | ✗             | ✓             | ✓             |
| Channel capacity   | 16 | 255 | INT, USA, CAN | INT, USA, CAN | INT, USA, CAN |
| Private channels   | ✓  | ✓   | ✓             | ✓             | ✓             |
| Robust accessory connector                                     | ✓  | ✓   | ✓             | ✓             | ✓             |
| LCD display**  | ✗  | ✓   | ✓             | ✓             | ✓             |
| Channel naming   | ✗  | ✓   | ✗             | ✓             | ✗             |
| Bluetooth wireless comms (option)                              | ✓  | ✓   | ✗             | ✓             | ✗             |

### For - Convenience

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Low battery warning                            | ✓ | ✓ | ✓ | ✓ | ✓ |
| VOX hands free                                 | ✓ | ✓ | ✓ | ✓ | ✓ |
| Battery charge count (requires LCD to display) | ✓ | ✓ | ✗ | ✓ | ✗ |
| Receive signal strength indicator              | ✗ | ✓ | ✗ | ✓ | ✓ |

### For - Security

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Programmable scrambler (voice inversion) | ✓ | ✓ | ✗ | ✓ | ✗ |
|--|---|---|---|---|---|

\*\* A full-featured version of the LCD VHF is available as a special order.

### Example of classification, based on IIC, 1 Watt:

- Ex Explosion proof equipment
  - i Intrinsically Safe - the energy levels in the circuits cannot cause accidental detonation
- II For use in areas where there is some risk of detonation
- C The most hazardous gas grouping, including hydrogen and acetylene
- T4 Based on the surface temperature not exceeding 135°C.

### Area classification

**Zone 1** covers areas where the environment is occasionally hazardous  
**Zone 2** covers areas where the environment is only rarely hazardous, and then only for brief periods.



Pictured: UHF ATEX variant with stubby antenna

'the professional's choice'



■ CSAHT



■ CSBHT



■ CMP750  
▲ CMP950



■ EA19/750  
▲ EA19/950



■ EA15/750  
▲ EA15/950



■ EA12/750  
▲ EA12/950



■ CXR5/750  
▲ CXR5/950



■ CXR16/750  
▲ CXR16/950



■ CHP750D  
▲ CHP950D



■ CHP750HS  
▲ CHP950HS

■ Not intrinsically Safe



# Technical Specifications

## General Specifications

|                            |             |                                  |
|----------------------------|-------------|----------------------------------|
| RF power output            | VHF         | 5W (high) / 1W (low)             |
|                            | UHF         | 4W (high) / 1W (low)             |
|                            | GMDSS       | 1W                               |
| RF power output ATEX       | IIA         | 4W (UHF) / 4W (VHF)              |
|                            | IIC         | 1W                               |
|                            | GMDSS (IIC) | 1W                               |
| RF power output IECEx      |             | 4W (high) / 1W (low)             |
| Frequency range VHF        |             | 156 to 163.275MHz INT, USA, CAN  |
| Frequency range UHF        |             | 400 to 470MHz                    |
| Frequency range UHF u/band |             | 450 to 520MHz                    |
| Environmental protection   |             | IP68 submersible 5m for 1 hour   |
| Military Standard          |             | MIL STD 810C/D/E/F               |
| Dimensions*                |             | 130mm(h) x 59.5mm(w) x 37mm(d)   |
| Weight                     |             | 277g (with battery and aerial)   |
| Audio output               |             | 660mW - distortion: < 3% @ 500mW |

\* Dimensions are based on radio with attached battery, excluding knobs, antenna and protrusions.

## Supplied Accessories

7.4v, 1800mAh Li-Ion battery\*\*

Trickle charger is included with HTX42 and HTX44 variants

Spring loaded belt clip\*\*

High efficiency antenna

User guide CD

\*\* GMDSS models can be supplied in different package combinations. Please consult your local dealer.

For a full and detailed specification see our web site [www.entel.co.uk](http://www.entel.co.uk)

Your local professional dealer

