

# Entel

## Versatile Business Solutions

## Company Profile

### About Entel

---

Established in 1995, Entel is a fully independent company operating its own design and manufacturing divisions, with distribution to a global market. Ranked among the leading industry brands, Entel brings exacting standards of innovation, quality and excellence to its professional radio communications equipment, so that users can communicate with confidence across land-based and marine applications.

Since we became a wholly independent manufacturer, our achievements have been considerable. Designed without compromise, our products offer a winning combination of quality and value, which is why, in recent years, Entel has won some of the most prestigious tenders in the commercial and public sectors. In the UK alone, we secured contracts with the [UK Fire & Rescue Services](#), the Ministry of Justice and a global contract with [G4S Security](#). Consequently, the Entel brand has become rapidly established worldwide. Our exponential growth demonstrates that the market does respond to innovative, dependable products.



Our UK-based R&D department brings a wealth of top-level expertise to the skill sets of hardware, mechanical, electrical and software engineering, exceeding customer expectations with unique and innovative features. Entel is also one of the only manufacturers that will write customised firmware on dealer request. Together with rigorous and uncompromising quality controls, applied throughout every step of the manufacturing process, this all adds up to a formidable range of radio products that has earned worldwide recognition for its quality, performance and high specification.

Our manufacturing facility is 100% owned by the Entel Group of Companies, operating internationally recognised SGS ISO9001 quality criteria. Subject to independent and exacting quality assessments, on an ongoing basis, the factory has also achieved approval status to manufacture ATEX intrinsically safe and MED survival craft products. Proof, if any more was needed, that Entel sets the standard for excellence in technology, service and support in today's rapidly evolving, professional radio communications world.

EntelVersatile Business Solutions

## News

### Product News

[HT20 Leisure marine portable wins Best Buy Award \(Jan 2015\)](#) With its long-established commercial pedigree, the leisure-orientated HT20 marine handheld radio was always going to be a winner. Motor Boat & Yachting Monthly magazine has cemented this radio's reputation by awarding the Entel HT20 its coveted 5-Star Rating.

[CXE19 Bone Conductive Headset \(Feb 2014\)](#) CXE19 uses advanced bone conduction technology for both transmit and receive making this headset highly suitable for stealth applications. The benefit of bone conduction technology allows the user's ears to remain uncovered so they can be fully aware of their surroundings whilst wearing the headset. Lightweight and waterproof, CXE19 is suitable for a variety of applications, such as defence, security, fire and rescue.

[Entel & General Dynamics develop digital meshing radio \(May 2013\)](#) Entel is pleased to announce its involvement in digital meshing radio technology. This latest enterprise by Entel's UK-based team is being conducted under a contract with General Dynamics for the Pathmaker™ Network. General Dynamics C4 Systems is a prime contractor and systems integrator with almost 50 years' experience in delivering communications solutions for military and government deployment.

[Bluetooth accessories released for HX Series \(Feb 2013\)](#) Due to strong dealer demand, Entel has invested in the development of Bluetooth technology for use with its Series 2.0 HX400 portables. This will allow Entel radios to interface with a multitude of Bluetooth accessories, offering clear, secure and comfortable wireless communications.

[Entel HT Series 2.0 granted NATO numbers for European military \(June 2011\)](#) Two of Entel's European dealerships have successfully won tenders for prestigious military contracts, after choosing to offer Entel's HT Series 2.0 radios.

The first dealer, RTC, based in Antwerp, supplied the Belgian Armed Forces with the HT725 advanced signalling VHF model, together with intrinsically safe UHF equivalents in the form of the [HT885 model](#). A total of 15 dealers tendered for the lucrative public sector contract, almost half of them offering Entel.

[Extreme durability tests NOW on video! \(July 2008\)](#) Entel makes sure that each individual radio meets the exacting standards of construction we have set for ourselves, not just meeting statutory requirements, but often exceeding them. Each portable has to pass a rigorous Quality Control procedure on our factory production line, but exactly how robust are Entel's radios? Controlled factory tests are one thing, but what about the rigours they might face in the "real world"?

---

# Entel

## Innovative Designs

## *R&D and Support*

### Research & Development

---

Entel's R&D division is driven from its UK headquarters and employs a highly skilled engineering team which is based in the UK. Each individual has their own field of expertise covering RF design, electrical engineering, software development, mechanical engineering, as well as design support staff. Working as a close, cohesive unit, their combined skills have provided Entel with leading-edge products that have successfully established the brand name worldwide.



Our product design schedule is coordinated by Entel's UK-based senior technical team which has gained industry recognition for identifying niche and emerging market opportunities. Our success lies in listening to our dealers' requirements, along with thorough market research and analysis. This responsive approach enables us to design and deliver the right products to market within a much shorter time frame.

Entel has a proven track record in the supply of intrinsically safe products to the oil and gas industry. Accepting that this is an important market sector for our business, Entel has invested in quality engineering resources and personnel. Uniquely, Entel is the only radio communications manufacturer to employ a highly experienced team of Senior Electrical Engineers. Based in the UK, they bring valuable experience from BASEFA and other recognised approval bodies. Their roles and responsibilities are solely dedicated to the intrinsically safe product portfolio.

### Repairs

---

Entel's repairs department is also a huge benefit to the end user who can always be confident that their radio can be maintained and repaired by Entel's own repairs department. Entel's commitment to fairness and value for money is clear and all radios submitted for repair can be assessed before providing a repairs estimate, which is offered at an industry low. Any repairs carried out is covered by a warranty and you can be sure that it has been carried out to the highest standard.

# Entel

## Innovative Designs

## Testimonials

### Product Testimonials

#### [French Navy Chooses Entel for its French Ensign Vessels](#)



Entel has won a four year contract to supply the French Navy with its well-respected HT submersible series of radios. The Marine Nationale decided to seek out the best possible radios for its most prestigious vessels - including the Charles De Gaulle aircraft carrier, the French Navy's iconic flagship, and Europe's largest warship - following concerns over the quality of radio products previously supplied from another manufacturer.

#### [Entel's HT500 series reaches new heights on world's second largest crane vessel](#)



**Saipem**

A leading oil contractor has chosen Entel's HT544 IECEx approved marine VHF radios to service the world's second largest offshore oil platform installation vessel. Saipem S.p.A has purchased a complete set of speaker microphones and spare batteries along with the radios for the S7000 crane vessel as part of its ongoing commitment to the health and safety of its staff.



# Entel

## Innovative Designs

## Testimonials

### Product Testimonials

#### Keeping safe in Cancun with Entel handheld radios



The Fire and Civil Protection Department in Mexico's premier tourist destination, Cancun, has embraced Entel's submersible HT700 series radios as the ideal solution to coordinating beach safety and off-shore rescue.



The resort sees more than 3 million visitors each year, meaning that reliable communications lie at the heart of keeping tourists safe. Unfortunately, the department's old splash-proof IP55 rated radios were simply not up to the job, getting damaged and corroded during operations at sea.

#### Entel ATEX PMR446 boosts energy giant's expansion in Romania



Romkatel, Entel's Constanta-based dealership in Romania, has once again fended off competition from other brands, this time by offering Entel's innovative PMR446 ATEX HT953 radios into the country's rapidly expanding energy sector

Hundreds of Entel hand portables are being supplied to guarantee worker safety below ground.



# Entel

## Innovative Designs

## Testimonials

### Product Testimonials

#### Latvian Railways On The Right Track With Entel's HX400

The Latvian Railway company, LDZ, has switched to Entel for its latest radio procurement, after being introduced to the Entel HX400 by Modis Ltd - a Riga-based radio dealership.



As part of an upgrade to the system's communications infrastructure, Latvian Railways had originally insisted on another leading, quality brand in its tender document, but Modis's confidence in the HX400 persuaded Latvian Railways to consider the proven HX400 series alongside their original preferred choice of hand portable.



#### Entel ATEX PMR446 breakthrough in Eastern Europe

PKN ORLEN, one of Central Europe's largest refiners of crude oil, has recently chosen to invest in Entel's HT952 ATEX PMR446 portable radio for the heart of its operation in Poland. The company, which began processing oil-based products in the 1960s has grown exponentially since 1999 when its shares were offered publicly, and has since become one of Poland's major export companies, supplying fuel into the automotive, aviation, military and manufacturing sectors.



# Entel

## Quality

### Manufacturing to exacting Standards

Established in 1995, the Entel Group designs and manufactures business critical radio communications equipment. Owing and managing both the R&D and Manufacturing functions, ensures that Entel has a deserved reputation for exacting standards of innovation, quality and excellence. With a Global footprint, Entel has a wide and varied customer base including The French Navy, UK fire and rescue services and Total Oil, Indonesia.



Entel's custom built manufacturing facility in Philippines has been granted approval by Securities & Exchange Commission to manufacture and export products for military applications.

The SEC Administers the Corporate and Capital market infrastructure to maintain and control regulatory systems and practices. Steve Mulka, Entel's Global Product Manager comments "this approval enables Entel to forge ahead with it's plans to be involved in this exciting market".



# Entel

## Products

### Land based Radio

Entel have produced two lines of land based portable radios.

The **HT700 Series** and the **HX400 Series**.

Each series has its own unique features but the main differences are that the HX400 Series is smaller while the HT700 Series is submersible.

Within each of these series there are various choices including frequency band, with or without LCD and other features that are chosen for each individual's needs.



There is also a vast range of accessories for either series and this is a key advantage when choosing an Entel product. There is an accessory for every conceivable requirement.

The quality and reliability of Entel's products is astounding and as each new model is produced, so are new improvements and features that benefit the end user time after time.

# Entel



## Products

### Entel HT700 Series Land based Radio

**Entry** For those requiring an entry level portable, with a no compromise MIL-STD810 C/D/E/F build specification, the 16 channel entry level HT7X2 is the most cost effective solution.

#### Entel HT700 Series

##### Conventional Variants



### Advanced Signalling Keypad

For systems communications requirements, the advanced signalling 255 channel HT7X6 is an elite product, providing feature rich and flexible communications. Features include FFSK signalling, as well as variable point voice scrambler, channel scanning, shunting mode, personal attack alarm, whisper mode and lone worker. Furthermore, man down, Bluetooth and GPS automatic location information options are also available.

For more information on each model and its features, please refer to the datasheet.

# Entel



## Products

### Entel HT700 with LCD Display

#### HT700 Series With LCD Display

→ Overview   Features   Accessories   Technical Specification

For those requiring an entry level portable with high visibility backlit-display and a no compromise build specification, the 255 channel HT7X3 is the most cost effective solution. From an established generation of commercial grade portables, the HT Series 2.0 is designed to operate in the most hostile environments and with its MIL-STD 810C/D/E/F construction and exceptionally loud audio, is the choice of the fire & rescue services and major blue-chip petrochem organisations worldwide.

Utilising the latest intelligent Lithium-Ion battery technology your HT7X3, if dealer enabled, will display a battery cycle count each and every time you power-on your radio. For your convenience it will even alert you to imminent battery life expiration.

Variable point voice scrambler, channel scanning, and local personal attack alarm are included as standard, with an optional Bluetooth communications facility. This low cost LCD entry level model will exceed the expectations of even the most experienced radio users.



#### Model Numbers & Frequency Variants

Model	Frequency	
HT703	VHF Low	30 - 50Mhz
HT713	VHF Mid	66 - 88MHz
HT723	VHF High	136 - 174MHz
HT783	UHF	400 - 470MHz
HT783-U	UHF u/band	450 - 520MHz

# Entel



## Products

### Entel HT446 Series Land based Radio

#### HT446L

- Overview
- Features
- Accessories
- Technical Specification

For those requiring a PMR446 portable with a high visibility back-lit LCD, the HT446L with its no compromise build ;specification, is the most cost effective solution. From an established generation of commercial grade portables, the fully submersible IP68 HT Series 2.0 is designed to operate in the most hostile environments and with its MIL-STD 810C/D/E/F construction and exceptionally loud audio, is the choice of the fire & rescue services and major blue-chip petrochem organisations worldwide.

Whether you display all 8 of Europe's currently allocated PMR446 channels, or using different CTCSS or DCS tones expand the channel capacity to a maximum of 255, the choice is yours. Utilising the latest intelligent Lithium-Ion battery technology your HT446L, if dealer enabled, will display a battery cycle count each and every time you power-on your radio. For your convenience it will even alert you to imminent battery life expiration.

The HT446L comes with channel scanning, VOX and local personal attack alarm, with optional Bluetooth communications facility and variable point voice scrambler. This low cost LCD model will exceed the expectations of even the most experienced radio users.



#### Model Numbers & Frequency Variants

Model	Frequency
HT446L PMR446	446.00625 - 446.09375MHz

# Entel

## Products

### Entel HX400 Series Land based Radio

**Entry** The first time you handle our HX400 Series 2.0 you will be impressed by its superior build quality. From the compact ergonomic design that fits comfortably in your hand, to the exceptionally loud audio that enables you to communicate in the noisiest environments, this portable, positioned as an entry level model, easily outclasses its competition.



### Advanced Signalling Keypad

The full keypad version of the advanced signalling 255-channel compact HX400 provides feature rich and flexible systems communications in a compact ergonomically designed portable. Built to MIL-STD 810C/D/E/F specifications with a superior splash proof IP55 rating, its exceptionally loud audio will enable you to communicate in the noisiest environments.

For more information on each model and its features, please refer to the datasheet.



## Products

### Entel HX400 with LCD Display

#### HX400 Series With LCD Display

- Overview
- Features
- Accessories
- Technical Specification

The first time you handle our HX400 Series 2.0 you will be impressed by its superior build quality. From the compact ergonomic design that fits comfortably in your hand, to the exceptionally loud audio that enables you to communicate in the noisiest environments, this portable easily outclasses its competition.

For those requiring an entry level portable with high visibility backlit-display and a no compromise build specification, the 255 channel HX4X3 is the most cost effective solution.

Utilising the latest intelligent Lithium-Ion battery technology with battery cycle count the entry level HX400 will even alert you to imminent battery life expiration. Channel scanning and local personal attack alarm are included, with Bluetooth communications and variable point voice scrambler available as options. This low cost portable will exceed the expectations of even the most experienced radio users.



#### Model Numbers & Frequency Variants

Model	Frequency	
HX403	VHF Low	30 - 50Mhz
HX413	VHF Mid	66 - 88MHz
HX423	VHF High	136 - 174MHz
HX483	UHF	400 - 470MHz
HX483-U	UHF u/band	450 - 520MHz



## Products

### Entel HX446 Series Land based Radio

#### HX446L

- Overview
- Features
- Accessories
- Technical Specification

The first time you handle our HX446L you will be impressed by its superior build quality. The compact ergonomic design that fits comfortably in your hand, as well as the exceptionally loud audio that enables you to communicate in the noisiest environments, identify the HX446L as a high end PMR446 portable.

The high visibility back-lit LCD will display all 8 of Europe's currently allocated PMR446 channels, or using different CTCSS or DCS tones expand the channel capacity to a maximum of 255 – the choice is yours.

This PMR446 model, like all our HX series 2.0 portables, meets the MIL-STD 810C/D/E/F rating for tough enduring performance and in addition has a superior IP55 splash proof construction.

Utilising the latest intelligent Lithium-Ion battery technology, your HX446L, if dealer enabled, will display a battery cycle count each and every time you power-on your radio. For your convenience it will even alert you to imminent battery life expiration.

The HX446L comes with channel scanning, VOX and local personal attack alarm, with optional Bluetooth communications facility and variable point voice scrambler. This low cost LCD model will exceed the expectations of even the most experienced radio users.



#### Model Numbers & Frequency Variants

Model	Frequency
HX446L PMR446	446.00625 - 446.09375MHz



# Entel



## Products

### Entel HT900 Series Intrinsically Safe Radio

**Entry** For those requiring an entry level portable, with a no compromise MIL-STD810 C/D/E/F build specification, the 16 channel entry level HT9X2 is the most cost effective solution. From an established generation of commercial grade portables, the HT Series 2.0 is designed to operate in the most hostile environments and with its exceptionally loud audio, is the choice of the fire & rescue services and major blue-chip petrochem organisations worldwide.

#### Entel HT900 Series

#### Conventional Variants



### Advanced Signalling Keypad

For systems communications requirements, the advanced signalling 255 channel HT9X6 is an elite product, providing feature rich and flexible communications. Features include FFSK signalling, as well as variable point voice scrambler, channel scanning, shunting mode, personal attack alarm, whisper mode and lone worker. Furthermore, man down, Bluetooth and GPS automatic location information options are also available.

Utilising the latest intelligent Lithium-Ion battery technology, your HT9X6, if dealer enabled, will display a [battery cycle count](#) each and every time you power-on your radio. For your convenience it will even alert you to imminent battery life expiration. This MIL-STD 810C/D/E/F construction, IP68 approved portable has a high visibility back-lit display with scrolling text, allowing for text messaging and the use of its easy to use [intuitive menus](#).

For more information on each model and its features, please refer to the datasheet.

# Entel



## Products

### Entel Marine Series Radio

#### Entry

For those requiring an entry level marine portable, with a no compromise MIL-STD810 C/D/E/F build specification, the HT642 / HT782 is the most cost effective solution. Utilising the latest intelligent Lithium-Ion battery technology with battery cycle count\* the HT642 / HT782 will even alert you to imminent battery life expiration. Part of the commercial grade HT Series 2.0 of marine portables and designed to endure the every-day rigours of life at sea, with its exceptionally loud audio and IP68 submersibility, this portable is the choice of the fire & rescue services and major blue-chip petrochem organisations as well as shipping companies worldwide.

Marine Radios

2.0 Marine Variants



#### LCD VHF GMDSS

Our HT649 GMDSS portable is MED certified and carries the essential Wheel Mark logo. For those requiring a full featured GMDSS portable, with high visibility back-lit LCD, the HT649 is the most advanced GMDSS portable available. For more information on each model and its features, please refer to the datasheet.

From an established generation of commercial grade products the HT Series 2.0 is designed to endure any emergency situation in the most hostile marine environment. Not just compliant with MIL-STD 810C/D/E/F, the HT Series GMDSS also exceeds the MED's IP67 submersibility requirement (1m - 30 minutes) Our GMDSS portables are uniquely approved to IP68 (5m - 1 hour).

# Entel



## Products

### Entel RP500 Series Base-Station (Repeater)

The RP Series base station is a high quality, affordable talk through base station. It offers the perfect solution to those users wishing to improve or extend the range of their local on site communication system.

**Model Numbers & Frequency Variants**

RP510	VHF Mid	66 - 88MHz
RP520	VHF High	136 - 174MHz
RP580	UHF	400 - 470MHz
RP580-U	UHF u/band	450 - 520MHz



Entel



## Products

### Entel Digital Meshing Radio

Pathmaker Network Radios provide dynamic wireless, mobile, ad-hoc networking communications without reliance on network infrastructure. Pathmaker Radio users become their own network, which makes the radios ideal for use in remote locations where no infrastructure exists or where the infrastructure has been destroyed or overloaded. Where legacy network infrastructure exists, the Pathmaker Network Radio System can take advantage of those networks by providing gateways, thereby increasing the network's footprint and reach.

With a maximum of 32 radio users per network, users can form traditional squad communications groups, or extend range and coverage by connecting to multiple networks. Users can communicate privately (one to one), as a group (one to many), and have multiple private and group sessions.

Pathmaker radios are built for critical missions in challenging conditions and provide:

- Superior simultaneous voice, data and video communications
- Position Location Information (PLI) technology to track radio users' locations
- Lightweight, low power use with 18 hours of battery life
- Network management software for radio configuration, radio elimination in case of loss, prioritization change, and over-the-air programming
- Gateway options for communications with other networks and/or systems (GSM, APCO25 or VHF/UHF, IP, SATCOM)
- Text messaging capability
- Multiple users on a single frequency to conserve spectrum space

These versatile radios work in a variety of situations, and are ideal for use by:

- Military and paramilitary
- Emergency first responders and disaster relief
- Law enforcement, border patrol and drug interdiction
- Forest Service, National Parks and Monuments
- Commercial and private industry



Model	Frequency
Pathmaker	2.4GHz

**NEW  
DIGITAL SERIES  
ARRIVAL 2016**