

mcmurdo

safety for professionals



McMurdo the Brand

McMurdo is a brand of marine safety and emergency location beacon products, manufactured by Orolia Ltd. The brand originated in the 1940's, and since that date has been involved in designing and manufacturing marine safety products.

The first McMurdo COSPAS-SARSAT approved EPIRB was produced in 1989, and McMurdo further galvanised its position as a leading brand in safety equipment technology in 1992, with the release of the first McMurdo GMDSS approved Search And Rescue Transponder (SART). McMurdo products have continually led the way in the functionality and accuracy of emergency location beacons, launching a PLB (Personal Locator Beacon) for use on land and sea in 2000. In that same year, GPS technology was introduced to both the EPIRB and the PLB.

2009 saw the launch of the groundbreaking, ultra compact Fast Find 200 range of PLBs, 2010 the cutting edge technology of the Smartfind S5 AIS SART, and 2011 the introduction of the innovative Smartfind S10 AIS Beacon.

The McMurdo brand name stands for high quality products, which utilise the latest technology. Organisations such as the Royal Navy, the US Coastguard and countless commercial organisations around the world understand the importance of ultra-reliable high quality equipment, which is why they have chosen McMurdo products for their vessels and their crew.

McMurdo products are used globally, on land and at sea. Where safety is important you will find McMurdo.



Service and Spares

Orolia Ltd has a complete customer service operation that handles the repair and servicing of our full range of products. From scheduled beacon battery changes, to the service and repair of McMurdo products, our team is here to help.

Our in-house service department operates in support of our worldwide service agents, who are fully trained and certified to service and repair McMurdo equipment. For your nearest service agent please visit www.mcmurdomarine.com.

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How does an EPIRB work?

An Emergency Position Indicating Radio Beacon (EPIRB) or Personal Locator Beacon (PLB) is used to alert search and rescue services in the event of an emergency. They do this by transmitting a coded message on the 406 MHz distress frequency. This message is relayed via satellite and earth stations to the nearest rescue co-ordination centre.

406 MHz EPIRBs and PLBs work with the Cospas-Sarsat satellite system which provides true global coverage.

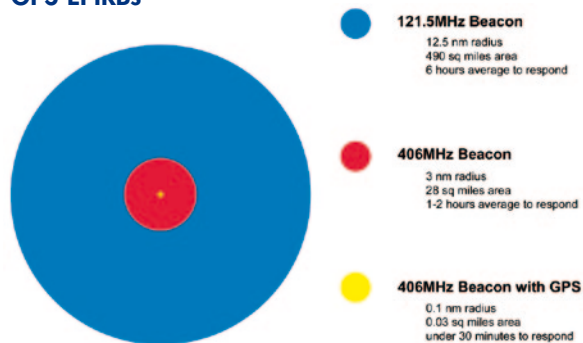


5km (3 miles). The coded message identifies the exact vessel to which the EPIRB is registered, or the person the PLB is registered to. This information allows the rescue services to eliminate false alerts and launch an appropriate rescue.

All McMurdo EPIRBs and PLBs also have a secondary distress transmitter. This transmits on 121.5 MHz and is used for “homing” purposes. When the rescue services get close, this allows them to direction find on the signal. To cater for searches at night, EPIRBs have a high brightness LED flashing light that aids final visual location.

Since its inception in 1982 the Cospas-Sarsat System has provided distress alert information which has assisted in the rescue of over 30,713 persons in over 8,387 distress situations. The Cospas-Sarsat programme assists search and rescue (SAR) activities on a worldwide basis by providing accurate, timely and reliable distress alert and location data to the International community on a non-discriminatory basis.

GPS EPIRBs



The GPS EPIRB and PLBs have been designed to further enhance the lifesaving capabilities of conventional beacons. The standard Global Positioning System (GPS) uses an array of 27 satellites and provides continuous positional information, with a typical accuracy of around 62m. A 406MHz EPIRB such as the Smartfind Plus, or PLB such as the Fast Find 220 and MaxG have a built in GPS. When the beacon is activated in an emergency, positional information is incorporated into the distress message which it transmits.

This incorporation of positional information overcomes the difficulties with location when using geostationary satellites, and can greatly reduce the time it takes for the SAR authorities to arrive on the scene. When speed of response and accuracy of location are important considerations, then the GPS EPIRB/PLB offers the best performance.

Smartfind

Available with a manual bracket or an automatic deployment housing, the Smartfind range meets the demands of recreational boaters and all classes of Commercial vessels alike. This stylish unit is available as a standard 406 MHz EPIRB or, for enhanced position location, with a built in high accuracy GPS.

Key Features

- Internationally Approved
- Transmits on 406 and 121.5 MHz
- Integrated GPS (G5 PLUS version)
- Non hazardous battery for safe and easy transportation
- Unique CARRYSAFE bracket available for safe transportation
- High brightness LED flashing locator light
- 60 comprehensive diagnostic and self-tests during battery life
- Once activated, will transmit for a minimum of 48 hours
- 5 year battery life
- 5 year warranty



SMARTFIND Manual EPIRB

The SMARTFIND Series consists of two models:

E5 SMARTFIND is a 406 MHz EPIRB designed to operate with the COSPAS-SARSAT international search and rescue system. Once removed from its CARRYSAFE mounting bracket the unit can be activated automatically by immersion in water, or manually by following the activation instructions printed on the unit.

The G5 SMARTFIND PLUS has all the advanced features of the standard E5 SMARTFIND with the addition of an integral multi-channel GPS receiver. The addition of a GPS receiver ensures that an accurate position of a casualty is relayed to the rescue services. This can in turn improve the speed of recovery by updating the position of the beacon at regular intervals.

A float free automatic housing is available for both versions of the SMARTFIND.



GMDSS

GPS

406MHz

121.5MHz

5yr

48hr

Technical Specifications

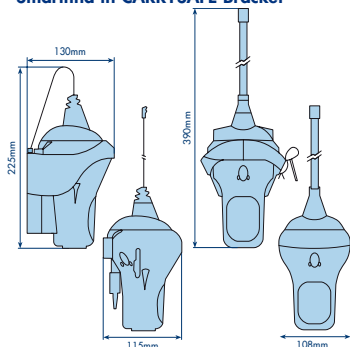
Smartfind & Smartfind Plus

Approvals	Satellite system	Cospas-Sarsat T.001/T.007
	Europe	IEC 61097-2 Marine Equipment Directive
	USA	USCG/FCC approved (Part 80) FCC ID : KLS-E5-1
	Worldwide	IEC 61097-2
	Meets IMO resolution	A.662(16); A.694(17); A.810(19); A.696(17)
406 MHz Transmitter	Operating frequency	406.040 MHz ±1 kHz
	Power output	5 W typical
	Modulation	Phase (16KOGID)
121.5 MHz Homer	Operating frequency	121.5 MHz ±3.5 kHz
	Power output	50 mW radiated typical
	Modulation	Swept tone AM (3K20A3X)
GPS Receiver (Smartfind Plus only)	Centre frequency	1.57542 GHz
	Sensitivity	-175 dBW minimum
	Type	High intensity LED
Strobe light	Type	Lithium manganese dioxide
	Operating life	48 hours minimum
Battery	Shelf life	5 years storage
	Operating temperature	-20 °C to +55 °C (-4° F to +131° F)
Environment	Storage temperature	-30 °C to +70 °C (-22° F to +158° F)
	Automatic release depth	4 metres max. (13 feet)
Physical	Weight	770 grams (1.7 lb)
	Height of body	21 cm (8.2 inches)
	Length of antenna	18 cm (7 inches)

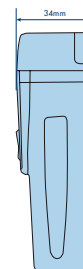
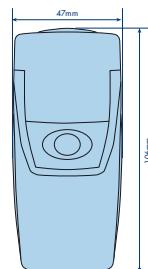
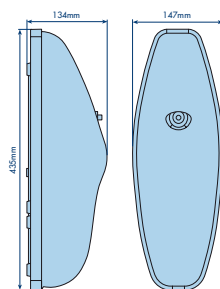
Fast Find 220

Standards	COSPAS-SARSAT T.001/T.007 class2, RTCM SC110 STD 11010.2, ETSI EN 302-152-1, AS/NZS 4280.2, NSS-PLB06
Sealing depth	Immersion to 10m (30ft) for 5 mins
Operating temperature	-20 to +55°C (-4 to +131°F)
Storage temperature	-30 to +70°C (-22 to +158°F)
Altitude	12,192m (40,000ft)
Buoyancy	Category 2, will not float (keep in buoyancy pouch provided)
Battery type	Lithium Manganese
Transmit duration	> 35 hours @ +10°C (50°F), > 24 hours @ -20°C (-4°F)
Battery life (storage)	6 years
Battery replacement	Service centre
Battery Use	Logged by microprocessor
Frequency	406.037MHz (alert) / 121.5MHz (homer)
Power	> 5W (alert) / > 50mW (homer) nominal
Unique ID Number	Factory or dealer programmed
GPS Type	50 channel, ceramic patch antenna
Size (D x W x L)	34 x 47 x 106mm (1.34 x 1.85 x 4.17in)
Weight	152g (5.4oz)
Indicator Light	High brightness LED signal light
SOS flash light	Morse code SOS flash pattern, 30 operations
Activation	Manual, three stage
Self-test	Tests transmitters, battery and light

Smartfind in CARRYSAFE Bracket



Auto FLOAT FREE housing for Smartfind



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safety for professionals

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