
Accelerated Location detection with GPS & Galileo receivers.

# FastFind 220™ Personal Locator Beacon

A lifesaving distress beacon with buoyancy pouch included, designed for marine enthusiasts and adventurers. The FastFind 220 is the world's first Galileo PLB, offering accelerated location detection with GPS and Galileo GNSS receivers.

# End-to-End Assured PNT Defense Platform

## FastFind 220

The FastFind 220 Personal Locator Beacon (PLB) uses advanced technology packed into a simple, lightweight, palm sized unit. Using the dedicated 406 MHz frequency, FastFind 220 transmits your unique ID and precise location to the global network of search and rescue satellites.

The FastFind 220's electronics design was upgraded in 2018, offering accelerated location detection with the duel GNSS capabilities — GPS & Galileo recivers.

Within minutes rescuers are alerted to your situation, and receive regular position updates. Finally, emergency services can home in on your beacon's 121.5 MHz transmission to find you.

Explore the world with peace of mind. If you find yourself in a remote area without any other form of communication, activating your FastFind 220 will summon emergency assistance.

## Features

- Floats with buoyancy pouch
- GPS & Galileo GNSS Receivers
- No subscription
- 6 year battery life
- Waterproof to 10m
- SOS morse LED flash light
- Safe-stow antenna

## Once activated, FastFind 220 transmits two signals simultaneously

**406 MHz** Professional global emergency service

**121.5 MHz** Homing signal to speed up local recovery

## FastFind 220 could save your life!

FastFind gives you:

- Mini size, MIGHTY emergency signal
- Simple design, easy to use
- Self test both the battery and GNSS
- Worldwide network of suppliers and service dealers
- Peace of mind to take your next step into adventure!

FastFind 220 has worldwide coverage and ensures you are rescued by professionals

## How the end-to-end satellite-based SAR Ecosystem works

I. A beacon distress signal is sent from aircraft, marine vessel or individual

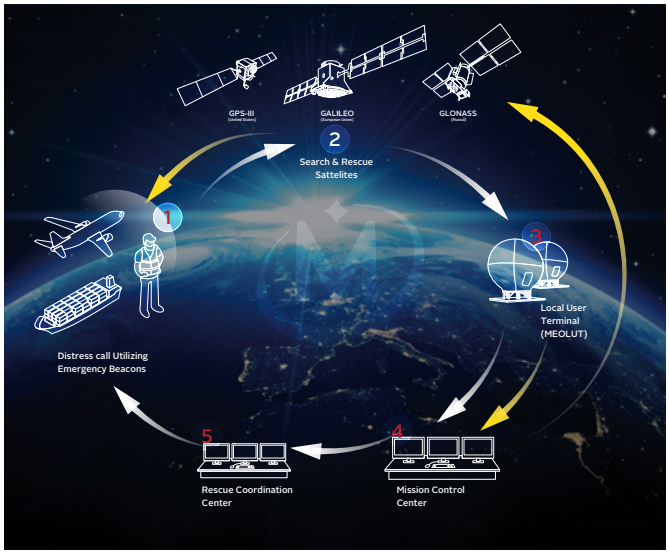
II. Beacon positioning/location data is relayed by satellite communications to satellite ground stations or Local User Terminals (LUTs)

III. The Local User Terminal computes the location before sending alerts to the appropriate Mission Control Centers (MCC)

IV. The Mission Control Center collects, stores and sorts the data received from LUTs and other MCCs and distributes alerts to associated Rescue Coordination Centers (RCC)

V. The Rescue Coordination Center notifies and coordinates emergency response/rescue teams

* Items in red are supplied by Orolia




## Understanding the MEOSAR Ecosystem

### MEOSAR Improvements Better Accuracy, Timeliness and Reliability

In the next few years Cospas Sarsat will be rolling out a new search and rescue infrastructure known as MEOSAR.

When fully deployed the aim is: Determine beacon location within 5km, 95%of the time, within 10 minutes.

- 72MEOSAR satellites positioned at Medium Earth Orbit altitude
- Near instantaneous beacon signal detection using bent pipe technology — average 46 minutes faster compared to LEOSAR
- Reduced response times with multiple signal bursts to improve speed and accuracy of location calculation
- Close to 100% reliability due to multiple antenna systems and MEOLUT networking
- When fully operational next generation beacons will also have a return link signal through Galileo satellites
    - Acknowledge signal receipt
    - Control beacon — remotely activate, turn off or confirm false alarm
- Lives are already being saving with the early operational MEOSAR through faster alerts and greater accuracy, for example in Australia where McMurdo has just finished MEOSAR ground infrastructure installation.

## The World's First Multi-Constellation PLBs

The FastFind, Solo and Ranger Personal Location Beacons will be the first PLBs to utilise the new Galileo satellites GNSS capabilities. The multi constellation receivers in Orolia Maritime's PLB – such as the FastFind 220, combine Galileo & GPS signals to offer increased global coverage, accelerated detection and precise location compared with single GNSS beacons.

- PLB works with wider range of satellites offering faster detection rates.
- By utilising the Galileo constellations the PLB benefits for Galileo's greater location accuracy, wider global coverage including the poles and it's canyon capability – detecting signals in high sided locations like a canyon or gorge.
- The end user benefit is greater more precise coverage to support accelerated rescueFastFind 220 has worldwide coverage and ensures you are rescued by professionals

## FastFind 220 PLB Specifications

| | |
|---|---|
| **Standards** | Cospas-Sarsat T.001/T.007 class2, RTCM 11010.2, ETSI EN 302152-1,, AS/NZS 4280.2, NSS-PLB11 |
| **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** | > 24 hours @ -20°C (-4°F) |
| **Battery life (storage)** | 6 years |
| **Battery replacement** | Service centre |
| **Battery Use** | Logged by microprocessor |
| **Frequency** | 406.031 MHz (alert) / 121.5 MHz (homer) |
| **Power** | 5W (alert) / 50MW (homer) nominal |
| **Unique ID Number** | Factory or dealer programmed |
| **GNSS Receiver** | GPS(L1)+GALILEO(E1), 72 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 (5.36oz) |
| **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 |
| **Warranty** | 1 year (+ 4 years with online registration) |



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