

SARBE[®] 10

SUBMARINE PERSONAL
LOCATOR BEACON - SPLB



**A new, world leading,
Survival Radio System for
Submarine Crews**



Signature Industries

The SARBE 10 Submarine Personal Locator Beacon - SPLB

The SARBE 10 SPLB is a new survival radio designed specifically for use by submarine crews. The beacon is designed for immediate activation prior to commencement of the escape procedure to ensure that the SPLB is transmitting on reaching the surface.

Once activated, SARBE 10 transmits an internationally recognised distress signal on the COSPAS / SARSAT compatible frequencies on 121.5 MHz, 243 MHz and 406 MHz. Additionally, the 406 MHz transmission contains a uniquely coded signal that declares the user organisation or code number as required. Central to the beacon's operation is a micro-controller that manages power, signal modulation and input/output logics. The technology used and the overall design philosophy is focused on high equipment reliability, maintainability and reduced life cycle costs.

SARBE 10 is a fully sealed flotation beacon and is able to withstand pressures in excess of 35 bar, equivalent to a water depth of 350m. The beacon comes with its own harness and is compatible with all escape suits. Additionally, SARBE 10 is positively buoyant so that on reaching the surface the survivor can readily deploy the beacon allowing it to float close whilst remaining attached. In the case of the Beaufort MK 10 escape suit the beacon can be attached to the life raft by an integral lanyard.

SARBE 10 can be tested quickly and simply before commencement of a mission or at regular intervals by lifting a lever mounted on the side of the unit. A red light gives an instant serviceability indication.

The SPLB provides a minimum operational endurance of 48 hours and the battery has a shelf life of 5 years when stored in temperate conditions.



Signature Industries

Signature Industries Ltd
Tom Cribb Road
Thamesmead
London SE28 0BH

Tel: (44) 020 8316 4477 / 020 8317 1717
Fax: (44) 020 8316 6218

Technical Specification

GENERAL

121.5 / 243 MHz Transmitter

Simultaneous operation on:	121.5 MHz \pm 6 KHz
Frequencies	243.0 MHz \pm 12 KHz
Modulation	AM
Modulation Rate	> 85%
Duty Cycle	1:2 transmitter on-off duty cycle
Endurance	> 48 hrs at -20°C
Range	> 70 nm (112km) at 10,000 ft.

406 MHz Transmitter

Frequencies	406.028 MHz \pm 2 KHz
Output Power	5 W
Transmission Duration	440 ms (short message) every 50 secs.
Repetition Rate	47.5 to 52.5 secs
Endurance	>24 hrs at -20°C

Antenna

Type	Whip
Frequencies	121.5 / 243 / 406 MHz
Radiation Pattern	$\frac{1}{2}$ wave on 243 and 406 MHz $\frac{1}{4}$ wave Loaded on 121.5 MHz

Battery

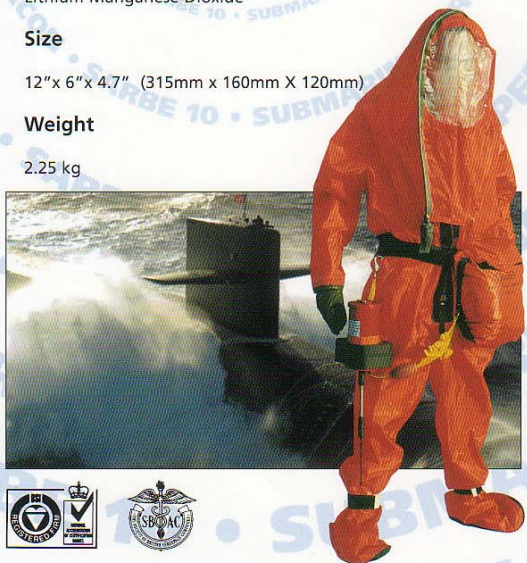
Lithium Manganese Dioxide

Size

12" x 6" x 4.7" (315mm x 160mm X 120mm)

Weight

2.25 kg



Signatures policy is one of continuous development.
The right is reserved to change specification without notice.

© Signature Industries Ltd. 2001

A subsidiary of  APPLIED DIGITAL SOLUTIONS