

sMRT SHIELD

The sMRT SHIELD is an innovative Personal Locator Beacon (PLB) that consolidates 406 MHz technology into a robust and compact unit. It incorporates Return Link Technology (RLS), alerting the user visually upon receiving their distress signal, and offers mobile app connectivity to ensure a comprehensive global alerting and locating solution.

With Return Link Technology (RLS) providing visual alerts to the user upon receiving their distress signal and the added feature of mobile app connectivity, the sMRT SHIELD is a modern and effective global alerting solution.



406 MHz
Transmits distress signal on the 406 MHz global satellite rescue system



121.5 MHz
Features a low power homing signal to assist local rescue efforts



RLS
Return Link Technology notifies the user that the distress signal has been received



Dual GNSS
Combines both GPS & Galileo GNSS receivers for accelerated detection

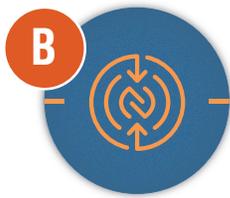


Mobile App
Mobile phone compatibility via NFC (Near Field Communication) and sMRT App

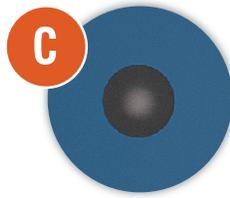
PRODUCT FEATURES



RETURN LINK SERVICE
Indicator lights showing the signal has been received



NFC COMPATIBILITY
NFC area to connect device with the sMRT APP



STROBE LIGHT
High powered strobe light to aid visual identification



TEST BUTTON
Activate a full device test & verify GPS acquisition is functioning



POWER BUTTON
Manual activation button to activate the device.



GNSS ZONE
Equipped with Dual GNSS for accurate location



Audible Alarm

Highlight activation to both aid location and raise awareness of false activation



Belt Pouch

Neoprene belt pouch provides drop protection and flotation capability to help protect the device



5 Year Battery Life

Ample power for both frequencies with the confidence of UK manufacturer's warranty



Dual GNSS Receivers

Dual GPS and Galileo GNSS receivers for accelerated location detection



Water Proof

The device is designed to withstand submersion up to 10 meters, ensuring its protection against water damage



Environmentally Conscious

Packaged in 100% recyclable materials & batteries must be changed at an approved service centre to insure recycling

PRODUCT OVERVIEW

Suitable for use in both land and inshore marine environments, the sMRT SHIELD 406 MHz Personal Locator Beacon with Return Link Service (RLS) offers a versatile and reliable distress alerting and locating solution. Housed in a compact and lightweight unit, the sMRT SHIELD also features 121.5 MHz frequency capabilities to provide additional location support once search and rescue assets are in close proximity to the casualty.

GLOBAL NETWORK

The sMRT SHIELD also features powerful 406 MHz technology, utilising the dedicated Search and Rescue (SAR) frequency monitored by 72 satellites in the global COSPAS-SARSAT network. This network was recently upgraded through the MEOSAR program to enhance the speed and accuracy of detection from SAR ground stations. This combination of local and global technology ensures a comprehensive global alerting and locating solution.

USER CONFIDENCE

The sMRT SHIELD provides both audio and visual indicators upon activation. Additionally our dual GNSS receivers include the European Galileo system and its exclusive Return Link Service (RLS) technology, which sends a reassurance signal to the PLB to confirm receipt of the 406 READY TO GO distress signal.

READY TO GO

Designed for ease of use, the sMRT SHIELD is ready to go straight out of the box. With a simple activation method that's easy to understand and without any complicated setup required, you can be reassured that the sMRT SHIELD will be ready when you need it most.

GENERAL

BATTERY TYPE	12V 1550mAh Lithium Manganese Dioxide (LiMnO2)
BATTERY LIFE	Min of 24 hours at -20°C
BATTERY SHELF LIFE AT +20°C	5 years
OPERATING TEMPERATURE	-20° to +55°C (-4° to +131°F) as per IEC 60945
STORAGE TEMPERATURE	-30° to +70°C (-22° to +158°F) as per IEC 60945
ENVIRONMENTAL	IEC Standard 60945
DIMENSIONS	111mm H x 60mm W x 38mm D - excluding antenna (D)
WEIGHT	185g
STROBE LIGHT	20 candela, 170 degree dispersion
SELF ID	ITU-R M.585 compliant factory programmed freeform Maritime Identity with 972 prefix
COMPASS SAFE DISTANCE	0.5m (1.5ft)

406 MHz TRANSMITTER

FREQUENCY	406.037 MHz
OUTPUT POWER	5+ Watts
STABILITY	2 ppb/100ms

121.5 MHz TRANSMITTER

FREQUENCY	121.5 MHz
TOLERANCE	±2 ppm
OUTPUT POWER	>25mW PEP (typical 63mW)

CONTROLS AND OPERATION

MANUAL ACTIVATION	2 step activation
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APPROVALS

SATELLITE APPROVALS	COSPAS-SARSAT, T.007 2024*
EUROPEAN APPROVALS	ETSI EN 302 152-1 V1.1.1, EN 303 132 V2.1.1, EN 60945:2002, EN 62368-1:2020 EN 301 843-8 (draft), EN 62209-1, EN 62209-2 EN 303 413 V1.2.1, EN 300 330 V2.1.1
US APPROVALS	RTCM STANDARD 11010.4, IEC 63269:2022, FCC CFR 47 Part 15B:2019, 47CFR 2.1093, FCC 47 CFR Part 2:2020*
CANADIAN APPROVALS	ICES-003 Issue 7:2020, RSS-102, RSS-287 Issue 2:2014 & RSS-GEN Issue 5:2018 Amd 2:2021*

* Approval is pending.