

TECHNICAL SPECIFICATIONS

General	
Battery Type	3 x 3 Volt LiMnO ₂ (Non HAZMAT) CR2 batteries
Battery Life	Minimum of 12 hours at -10°C (14°F) and longer in warmer conditions
Battery Shelf Life at +20°C	10 years
Operating Temperature	-20° to +55°C (-4° to +131°F)
Stowage Temperature	-30° to +70°C (-22° to +158°F)
Dimensions	12 x 7.8 x 3cm (4.7 x 3 x 1.22in) excluding antenna and clip
Weight	153g (5.4oz) excluding antenna and clip
Case	Impact resistant and water resistant to 10m (33ft)
Durability	Tested as per IEC Standard 60945
Strobe Light	360° dispersion at 5 candelas. Flash rate 1Hz.
Environmental Resistance	IP68 (10m for 5 mins)
Mounting Options	Includes attachment for webbing, harness or personal floatation device
Compass Safe Distance	0.3m (for minimal deflection)
Buoyancy	Positive buoyancy
Alerting Radius	2-10 nautical miles depending on sea state and altitude of receiving antenna
Limited Warranty	2 years (additional 3-year extended warranty available)
Controls and Operation	
Activation Time:	
Automatic Activation	After 5 seconds of immersion in water using water sensing terminals with a 10 second transmission delay before full activation
Manual Activation	Switch activation with a 10 second transmission delay
Operation Controls:	
Arming Switch	Three position: ON; READY; OFF
Test Button	Activates complete self test suite cycle. Voice enunciated.
V100 Warning State:	
Strobe	Flashes once per second
Voice Enunciation	"Warning V100 activated"
Bi-colour LED	Green flash every 4 seconds if battery good
V100 Alarm State:	
Strobe	Flashes once per second
Voice Enunciation	"Emergency transmission activated"
Bi-colour LED - Alternate Orange/ Green Flash	Flashes every 4 seconds. Indicates good battery and acquiring GPS lock. V100 is transmitting voice MAYDAY and DSC messages without location data.
Bi-colour LED - Green Flash	Flashes every 4 seconds. Indicates good battery and GPS has acquired a position. V100 is transmitting voice MAYDAY and DSC messages with location data with simultaneous voice enunciation "Emergency voice transmission" and "Emergency DSC transmission".
Bi-colour LED - Red Flash	Flashes every 4 seconds. Indicates low battery and GPS has acquired a position. V100 is transmitting voice MAYDAY and DSC messages with location data with simultaneous voice enunciation "Emergency voice transmission" and "Emergency DSC transmission".
V100 Test State:	
Strobe	3 quick flashes
Voice Enunciation	Two beeps followed by "Mobilarm V100 Test Menu"
Bi-colour LED	Slow flashing orange
V100 Test Menu:	
Water Activation Test	Tests operation of the water sense circuitry
Voice Message Test (Configurable)	Transmits a low power test message on VHF channel 73
DSC Message Test	Transmits a low power DSC test message on VHF channel 70

TECHNICAL SPECIFICATIONS (CONT.)

GPS Test	Activates the GPS subsystem and acquires a position lock
DSC Position Test	Transmits a "Position Send" message on VHF channel 70
Battery Test	Estimates hours of operation remaining
GPS Receiver	
Channels	20 channel parallel
TTFF (Time to First Fix)	Usually within 45-60 seconds
Antenna	Solid state quadrafilar helix
GPS Sensitivity	Better than -160dBm
Antenna Power Output	
Antenna Type	Vertically polarized helix antenna
VHF DSC Tx Power Output	1 watt
VHF Voice Tx Power Output	1 watt
VHF Transmitter Package	
DSC Transmitter:	
Compliance	ITU-R M. 493-11 and ITU-R M. 451-9
Radio-Telephone Voice Transmitter:	
Compliance	IEC 60945
VHF DSC Channel 70 Alerts:	
Initial DSC Alert	10 seconds from water detection and/or manual activation
First DSC GPS Data Alert Sent	Once GPS lock acquired
Subsequent DSC Alerts (Configurable)	Every 5 minutes for 30 minutes (6 total); every 10 minutes thereafter until the beacon is switched off or the batteries expire
VHF Voice Channel 16 Alerts:	
First VHF Voice GPS Data Alert Sent	Once GPS lock acquired and initial DSC GPS data alert sent
Subsequent VHF Voice Alerts (Configurable)	Every 5 minutes for 30 minutes (6 total); then every 10 minutes thereafter until the beacon is switched off or the batteries expire

COMPLIANCE AND CERTIFICATION

Certification (Pending)	
USA	FCC; USCG; ATEX; RTCM standard 11901.0; RoHS
Australia	C ¹ ; ACMA ¹ ; IEC ² ; ATEX; AMSA; RoHS
Europe	CE; IEC ³ ; ATEX; WEEE; RoHS
Compliance	
VHF DSC	Designed according to ITU-R M. 493-11 and ITU-R M. 451-9
Strobe Light	USCG SOLAS Lifejacket Light Requirement
GPS	Complies with IEC Standard 61108-1

¹ AS/NZS 4415.2:2003; Standard 2004; Standards Australia Committee RC/4 MSLS DSC Standards

^{2 3} IEC Standard 61108-1 and 60945

Note regarding sale into the USA and FCC compliance: This device has not been authorized as required by the rules of the Federal Compliance Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.