CLiMBERguard™
AUTOMATED CLIMBER DETECTION
AUTOMATED CLIMBER DETECTION

CLiMBERguard automatically detects, tracks and classifies intruders scaling the side of a vessel or structure, immediately alerting operators to the climber and its location.

CLiMBERguard has been developed from the MARSS man-overboard detection technology to provide higher probability of detection and low false alarm rates for vessel security.

CLiMBERguard units positioned around the vessel perimeter to provide coverage of the entire hull.
CLiMBERguard™

SMART SYSTEM: HIGH PROBABILITY OF DETECTION, REDUCED FALSE NOTIFICATIONS

CLiMBERguard uses a multi-sensor approach and multi-stage decision hierarchy to reliably detect, classify and track an intruder scaling the side of a vessel.

MULTI STAGE DECISION HIERARCHY

1. Multiple radars simultaneously monitor ship side ensuring climbers are detected and tracked
2. Radar tracks are confirmed by co-located independent radar sensors
3. Behaviour of confirmed track is analysed (based on speed, movement, shape)
4. Climber radar track is verified with infrared signature (heat, object shape, dimension, range)
5. Visual confirmation by crew based on video replay to confirm alarm

EVENT TIMELINES
Geo-located & time stamped alarms and diagnostic events, playback up to 120 days

CCTV FEEDS
Videos from all cameras are constantly displayed for uninterrupted situational awareness around the vessel

LIVE VIDEO FEEDS
Video footage of the event is presented to the operator within seconds for immediate review and alarm confirmation or dismissal
TECHNICAL SPECIFICATION

System Performance
- Probability of detection: 95%
- False alarm rate: <0.3 per day
- Detection range along hull: 80m on each side of sensor station
- Detection distance from hull: 0-10m
- MOB warning initiators: Autonomous
- Wearable devices: Not required

User Interface
- OS: Linux
- Operator stations: Multi-touch tablet up to 78” screens
- Recording storage: 7/30/90/120 day storage available
- Hot swap redundancy: Yes (each pod can be stand alone)
- Hardware: No central server. Only a NVR server required.
- Video replay for confirmation: Yes
- Audible alarm: Yes
- Data storage: 120 days

CLiMBERguard Sensor Payload
- Radars: High resolution, solid state
- Thermal cameras: 640x512 pixel, uncooled

CLiMBERguard Sensor Environment and Certifications
- Ingress Protection: IP68
- Operation Temperature: -20°C to +70°C
- EMC/EMI: IEC 60945:2002(E)
- Other certifications: CE marking, RoHS

Physical Characteristics
- Mechanical structure: Marine grade stainless steel
- Radome: ABS
- Weight: 12kg
- Dimension: 350mm x 330mm x 330mm

CLiMBERguard Sensor Power Specifications
- Mob Sensor multi power supply: 12/24VDC or 110-230VAC
- Power consumption: 109W (peak)

*Actual performance may vary depending on hardware specified, vessel characteristics, installation and other external conditions. Specifications, technical data and product availability are subject to change without notice.*