LiVAULT

SAFE STORAGE AND CHARGING OF LITHIUM BATTERIES

MARINE SQUARE BOX

RACLAN



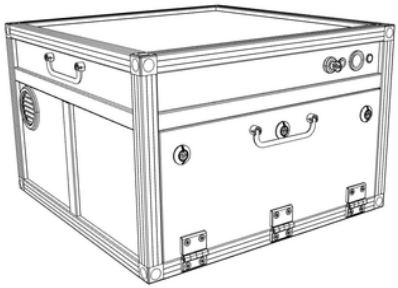
Portable Safety System for Charging and Storage of Lithium-Ion Batteries at Sea



RACLAN MARINE SQUARE BOX

PHILOSOPHY

The RACLAN Marine Square Box is designed to bring professional-grade lithium-ion battery safety to the everyday realities of life at sea. Combining secure storage, integrated charging and active safety technology within a compact, portable enclosure, it provides a controlled environment for batteries used in tenders, water toys and onboard equipment. Engineered specifically for the marine environment, RACLAN delivers practical protection without compromising valuable onboard space, offering yacht owners and crew greater confidence in how lithium-ion batteries are stored, charged and managed.



INDEPENDENTLY TESTED, VERIFIED & CERTIFIED **SYSTEM & COMPONENTS**

TÜVNORD DMT

TEST PROTOCOL M02/22
Cert. number: 3540 2636
Test Protocol: M02/22
Thermal runaway certfification parameters:
Explosion, Fire, Gas Management

ACTIVE RESPONSE

80°C Internal temperature

Response: - Charging disconnects
- Local alarm
- AMCS/FAS Alarm
- 10L Coolant drenching begins

Certified battery capacity
3.5 kWh of Lithium-Ion Batteries

Internal back up battery (90 days)
12 V $LiFePO_4$

Power supply
100-230 V / 50-60Hz

Cooling agent
Trident BJD

KEY FEATURES

Integrated Battery Charging
Dedicated internal sockets allow lithium-ion batteries to be charged within the protected enclosure.

Continuous Temperature Monitoring
Internal temperature monitoring provides continuous surveillance of operating conditions and identifies abnormal temperature increases.

Automatic Charging Isolation
Charging power is automatically disconnected when elevated temperatures or smoke detection indicate a potential safety event.

Passive Ventilation
Warm air generated during normal charging can escape through the filter system

Integrated Fire Suppression
Automatic suppression using an internal resevoir of ceritified coolant provides rapid cooling and suppression within the enclosure.

Battery Off-Gas Treatment
Integrated catalytic treatment manages hazardous battery off-gases, including hydrogen (H_2) and hydrogen fluoride (HF).

Audible Alarm
An integrated 80 dB audible alarm provides local notification of system faults and safety events.

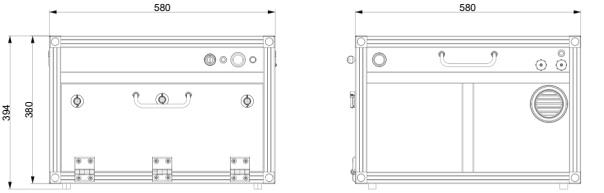
Vessel Alarm Integration
Connectivity to the vessel's fire alarm system and Alarm Monitoring and Control System (AMCS) allows RAMBSS alerts to be incorporated into onboard monitoring.

Redundant Safety Components
Critical safety functions incorporate backup components to improve operational resilience and system availability.

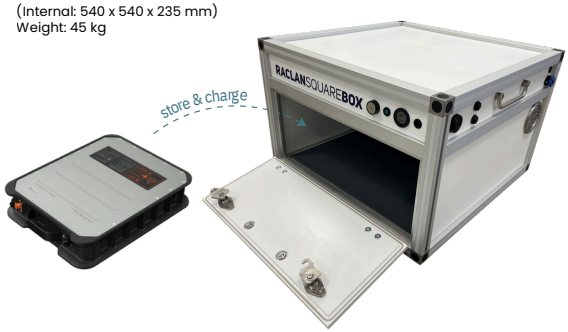
90 day Back Up Monitoring
An internal backup battery maintains essential monitoring and safety functions in the event of loss of the primary power supply.

Ballistic Construction
Robust enclosure construction incorporates A60 fire-resistance and ballistic protection requirements.

Door Lock Sensors
Charging is disconnected when door opens



RACLAN MARINE SQUARE BOX
580 x 580 x 380 mm
(Internal: 540 x 540 x 235 mm)
Weight: 45 kg



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