LiVAULT
SAFE STORAGE AND CHARGING OF LITHIUM BATTERIES

SQUARE BOX

RACLAN

Portable Safety System for Charging and Storage of Lithium-Ion Batteries In Industry

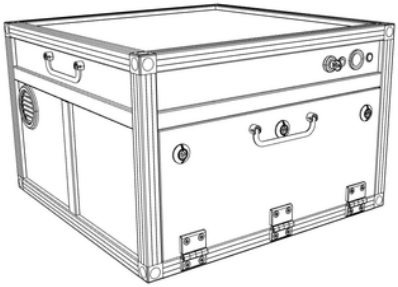




RACLAN
SQUARE BOX

PHILOSOPHY

The RACLAN Square Box provides secure, controlled storage and charging for lithium-ion batteries in commercial, industrial and professional environments. Combining robust construction with integrated monitoring and active safety technology, it helps manage the risks associated with battery storage and charging in a compact, portable solution.



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

TÜVNORD DMT

TEST PROTOCOL M02/22
Cert. number: 3542 1101
Test Protocol: M02/22
Thermal runaway certfification parameters:
Explosion, Fire, Gas Management

ACTIVE RESPONSE

80°C Internal temperature

Response: - Charging disconnects
- Local alarm
- 10L Coolant drenching begins

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).

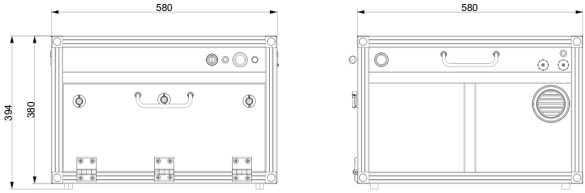
Audible Alarm
An integrated 80 dB audible alarm provides local notification of system faults and safety events.

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

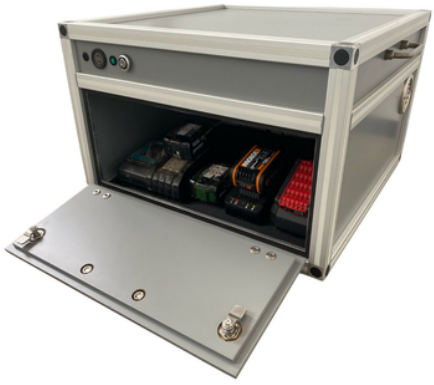
90 day Back Up Monitoring
An internal backup battery maintains essential monitoring and safety functions in the event of loss of the primary power supply.

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

Door Lock Sensors
Charging is disconnected when door opens



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



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

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