

POWERING AGRICULTURE

**ADVANCED ENERGY
STORAGE SOLUTIONS**



HUBBLE ENERGY

a Bud Group Company



Hubble Energy is proud to be a part of the Bud Group, a leader in manufacturing, industrial services, minerals beneficiation, and energy solutions.

| MANUFACTURING | INDUSTRIAL SERVICES | MINERALS BENEFICIATION | ENERGY SOLUTIONS |
|---|---|---|---|
| MANUFACTURING | RENTAL AND EQUIPMENT | SALT | POWER STORAGE |
|    |     |    |  |
| | | LIME AND CARBONATES | |
| ASSET BASED FINANCE | ASSET BASED FINANCE | CLAY | |
|  |  |  | |

Hubble Energy designs, engineers and supplies lithium batteries for the solar, renewable and power back up industry in South Africa, Sub Saharan Africa and Europe.

PERFORMANCE

AGILITY

INNOVATION

PARTNERSHIP

DELIVER RELIABLE POWER SOLUTIONS TO CREATE A SUSTAINABLE FUTURE FOR ALL

+ LOCAL R&D

Our in-house R&D engineers and software developers solve unique energy challenges for South African and broader African markets while remaining at the forefront of energy technology.

+ ON THE GROUND EXPERTISE

With 30 years of combined industry experience, our team is equipped to provide rapid assistance and remote diagnostic services.

+ QUALITY & RELIABLE PRODUCT

Our products combine industry-leading technology with local R&D expertise, resulting in world-class solutions tailored to local challenges.

SALES, SUPPORT AND REPAIR CENTRES ACROSS SOUTH AFRICA




ENERGY IN THE AGRICULTURAL SECTOR



Due to the high dependence on diesel fueled generators and the increasing cost of energy, farmers are looking at alternative, sustainable energy sources.

- + Energy security, reduced disruptions
- + Predictable & manageable energy costs
- + Improved sustainability for access to green markets

A photograph of a center pivot irrigation system in operation over a green field. The mainline pipe runs horizontally across the top, with several lateral pipes branching off. Each lateral pipe has a blue cap and a green riser pipe. From each riser pipe, a white plastic emitter is hanging, and a fine mist of water is being sprayed onto the ground below. The background shows a clear sky and a fence line.

“Farmers are already reporting huge losses as processing machinery, irrigation equipment and other machinery are damaged and come to a standstill due to power outages.”

- AGRI SA



WHY CHOOSE HUBBLE FOR AGRI?

- + Off grid, on grid, solar ready
- + World class product with local expertise
- + Local support, training and commissioning
- + SLA & comprehensive warranty
- + Remote monitoring & management via EMS*
- + Proactive monitoring services
- + Scalable and bespoke solutions

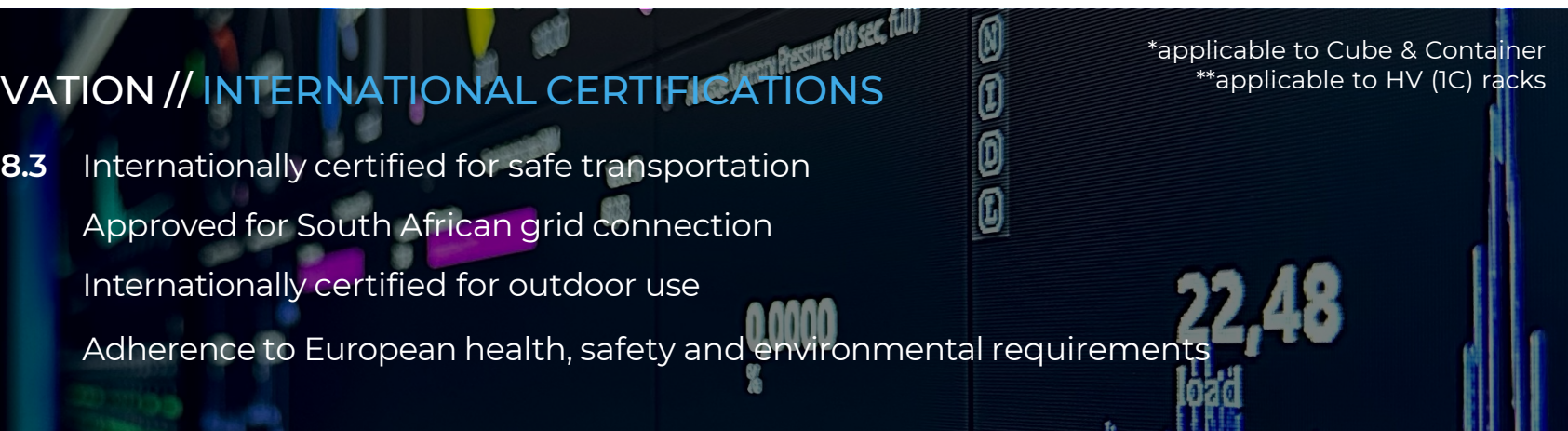
"We aim to empower the agricultural sector to independently manage their energy storage and production, with leading technology, that ensures product quality and cost reduction"

- Marius Vincent, CEO

LOCAL INNOVATION // INTERNATIONAL CERTIFICATIONS

- UN3536* & UN38.3** Internationally certified for safe transportation
- NRS 097*** Approved for South African grid connection
- IP54*** Internationally certified for outdoor use
- CE**** Adherence to European health, safety and environmental requirements

*applicable to Cube & Container
**applicable to HV (1C) racks



**HUBBLE
ENERGY**



COMMERCIAL, INDUSTRIAL & AGRICULTURAL SOLUTIONS

Scalable & Bespoke Energy Storage Systems

20.4kWh - 1290kWh



HUBBLE HIGH VOLTAGE RACKS (1.0C)

The Hubble High Voltage System uses innovative smart technology to bring you an easily upgradeable solution. Featuring an intelligent touchscreen display and Wi-Fi-enabled monitoring for both live and historical remote monitoring & management.

Ranging from 204-768V and built with a 1C rating, the units can be paralleled with up to 8 ESS systems per string with full communications.

- + 1C Rating
- + Smart BMU
- + Tested and certified
- + Intelligent touch screen display
- + Remote firmware updates
- + Remote monitoring, management and diagnostics
- + Modular, buildable design (from 20.4-614.4kWh BESS storage)



HUBBLE HIGH VOLTAGE RACKS (0.5C)

The HV-768 features a modular, easy to install design and an intelligent touchscreen display for both live and historical remote monitoring & management.

Built with a 0.5C rating, the units can be paralleled with up to 10 ESS systems per string (up to 2.15MWh) with full communications and remote monitoring.

- + 0.5C Rating
- + Tested and certified
- + Fire suppression system
- + Superior 10 000 cycle life
- + Advanced cell balancing
- + Modular design, easy to install
- + Intelligent touch screen display
- + Remote monitoring, management and diagnostics via EMS



HUBBLE ENERGY CUBE



In the day to day of diesel costs and high noise levels, Hubble Energy introduce the silent generator, the Energy Cube.

The Cube, an all-in-one solution (107kWh & 215kWh), can be used as a generator replacement and contains a fire suppression system as well as a world class EMS for remote monitoring and management.

- + IP54
- + Silent
- + Tested and certified
- + 10 Year warranty (Ts & Cs Apply)
- + Service level agreement
- + Fire Suppressant system
- + Easy installation and no rigging required
- + Intelligent operation and management via EMS
- + Remote monitoring, management and diagnostics via EMS



HUBBLE CONTAINER SOLUTIONS



Agricultural areas face challenges related to connectivity, reliability and remote access.

The Hubble container solution is an all-in-one solution featuring the modular Hubble High Voltage 0.5C rack, the IP54 rated system can withstand tough conditions. Hubble offers a local team can provide on-site assistance and commissioning.

- + IP54
- + Scalable
- + Tested and certified
- + Service level agreement
- + Superior 10 000 cycle life
- + Fire detection and Suppressant system
- + Insulated walls and temperature controlled
- + Intelligent operation and management via EMS
- + Remote monitoring, management and diagnostics via EMS



A TRUSTED TRACK RECORD



Our installations range from game lodges to salt pans




**POWERING
LUXURY.**

The Outpost




204kWh

4 X HV512
Battery sets installed



**POWERING
SUPPLY.**

Lebone Litho Printers



1.74MWh

34 X HV512
Battery sets installed



**POWERING
SOLUTIONS.**

Bud Rental Services



204kWh

4 X HV512
Split into 2 X battery sets



**POWERING
INDUSTRY.**

Cerebos



2.211MWh

76.8V 120ah 1C battery
24 X 92.16kWh battery racks