



# LOW VOLTAGE SOLUTIONS

ADVANCED ENERGY STORAGE SOLUTIONS

+ 1.2kWh – 10kWh



POWERING YOUR HOME

**HUBBLE ENERGY DESIGNS, ENGINEERS & SUPPLIES LITHIUM BATTERIES FOR THE SOLAR, RENEWABLE AND POWER BACK UP INDUSTRIES IN SOUTH AFRICA, SUB-SAHARAN AFRICA & EUROPE.**



**Hubble operates in 4 Provinces across South Africa offering service, repair and training.**

**Hubble Energy products are designed for easy installation, innovative functionality, and excellent quality.**

They provide cost savings, energy independence, reliable power supply, and promote environmental sustainability.

## INNOVATION

Our in-house R&D engineers and software developers design custom energy storage and monitoring solutions tailored for the renewable energy and power backup sectors.



## QUALITY

We only use the highest quality prismatic cells from leading manufacturers. This includes BYD, CATL and NMC prismatic Li-Ion cells, which are known to be the leaders in high quality lithium cells.

## COMPREHENSIVE SUPPORT AND TRAINING

Our local presence ensures a commitment to quality and after-sales support, with accessible customer support readily available and informative training events held regularly.

## LOCAL REPAIR CENTRES

The presence of our local repair centers in Cape Town, Johannesburg and Durban, along with our extensive inventory of spare parts, guarantees swift turnaround times and localized assistance.



**HUBBLE ENERGY IS A MEMBER OF THE BUD GROUP**

**The Bud Group is a services, manufacturing and distribution group.**  
A diversified group, operating across manufacturing, industrial services, minerals beneficiation and energy solutions.

PRODUCT RANGE	S-SERIES	BALANCERS	CLOUDLINK	X-SERIES	AM-SERIES	BLADE
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**REMOTE MONITORING CAPABILITIES**

These advanced low voltage batteries are designed to connect effortlessly with the Hubble Cloudlink, enabling convenient remote monitoring. Notably, the Blade and AM-10+ battery comes with a built-in Cloudlink.

**SEAMLESS INTEGRATION**

Seamless integration with a variety of inverters through CAN bus communications and voltage settings.

**ADVANCED LITHIUM TECHNOLOGY**

Engineered with advanced first-life prismatic lithium-ion cells, Hubble Energy's batteries deliver unparalleled reliability and performance across a wide range of applications.

**VERSATILE RANGE**

Spanning from 12V to 51V, with versatile mounting options and standalone configurations to suit your needs.



**S-SERIES**

1.2kWh | 12.8V



**BALANCERS**

24V | 48V



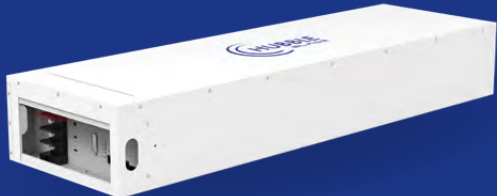
**AM-SERIES**

3kWh - 10kWh | 25V - 51.2V



**X-SERIES**

5.5kWh | 48V



**BLADE**

7.2kWh | 51.2V

# S – SERIES

Our S-Series are high performing, lead acid drop-in replacements. Featuring first life cells, these powerful batteries are perfect for recreational vehicles, small residences, camping applications, and can be paralleled up to 16 batteries in 48V configuration.

## S-100A

1.2kWh | 12.8V

- + 1C Performance
- + Series and Parallel Ready
- + Charge and Temperature Protection
- + Lead Acid Replacement\*



## S-100B

1.2kWh | 12.8V |  Bluetooth

- + 1C Performance
- + Series and Parallel Ready
- + Charge and Temperature Protection
- + Lead Acid Replacement\*



\* When paired with lithium compatible inverters

Item	Specifications	
Model	Hubble S-100A	Hubble S-100B
Nominal Energy	1.2 kWh	
*Rated Capacity	100 Ah	
Nominal Voltage	12.8 V	
Discharge Ending Voltage	12 V	
Charging Limited Voltage	14 V	14.4 V
Max. Continuous Charging Current	100 A	
Max. Continuous Discharging Current	100 A	
C Rating	1.0 C	
Depth of Discharge	100%	
Weight	Approx. 10.5 Kg	
Configuration	4 in series with 4 banks in parallel for maximum 16 batteries	
Parallel	Parallel connection is up to 4 strings	
Dimensions (WxDxH) mm	305mm x 170mm x 220mm	340mm x 185mm x 235mm
Maximum DC Limits	Max 100A charge per bank & 100A discharge per bank	
Cells	1st Life Prismatic LiFePO4	
Design Life	+/- 15 Years	
Cycle Life @ 1C	+/- 4000 Cycles	
Certification	CE, UN38.3, GBT31484-2015, GBT31485-2015, GBT31486-2015	
Outer Package Material	Black Polypropylene Plastic	
Operating Temperature	Charging: 0 to +55°C   Discharging: -20 to +55°C   Storage: -20 to +55°C	
Protection	Electronic Circuit Breaker, BMS Voltage Protection, Current Limiting	

\* Due to continuous product improvements specifications are subject to change without prior notice.

\*\* When connecting multiple S100A batteries in series, ensure you use a battery balancer else the warranty will be void.

\*\*\* To prolong battery life the recommended charging current is 30A.

# BALANCERS

It is required to install an active balancer when the S-Series batteries are connected in series. The active balancer ensures that the batteries are equalised and are in a good condition when operating in series.

## HA11

24V

- + Keeps batteries in optimal condition
- + Up to 10Amp inter battery balancing
- + Ensures longer service life of batteries
- + 24V Active balancer for S-Series batteries
- + Highly recommended for batteries in series
- + Bluetooth enabled with phone app monitoring
- + Easily connect to batteries with included wiring



## HA12

48V

- + Keeps batteries in optimal condition
- + Up to 10Amp inter battery balancing
- + Ensures longer service life of batteries
- + 48V Active balancer for S-Series batteries
- + Highly recommended for batteries in series
- + Bluetooth enabled with phone app monitoring
- + Easily connect to batteries with included wiring



# HUBBLE CLOUDLINK

## MONITOR | MANAGE | DIAGNOSE

- + Cloud monitoring of batteries and inverters
- + Compatible with leading inverter brands
- + Installer site management dashboards
- + Engineered, designed and assembled in South Africa
- + Smart 1 Phase and 3 Phase meter ready for Cloud monitoring
- + RS232, CAN bus, RS485 Modbus communication port



### Industry Leading Data Resolution

The Cloudlink captures data at intervals as short as 5 seconds, allowing for exceptional accuracy in monitoring, assessment, and diagnostics

### 24/7 Real-time and Historical Data

Access to both live and historical data from both inverters and batteries

### Remote Diagnosis

Technical support team able to provide rapid and accurate remote diagnostic services

### Global Oversight

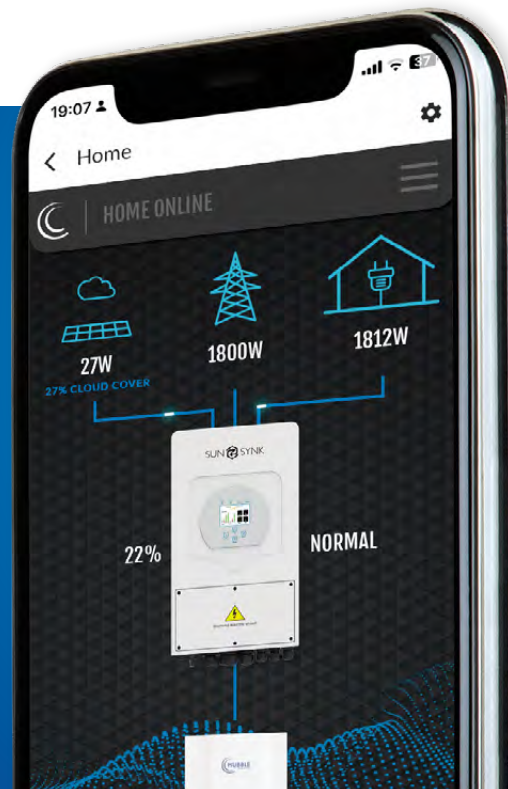
The ability to manage, oversee and automate power systems at scale with the Cloudlink's Fleet Management capabilities

### Operational Flexibility

Remotely control supported inverters with the ability to switch between different operation modes and alter configuration settings

### Advanced Management Features

Access advanced management features such as smart SOC prioritisation, dynamic charge control and adaptive limits




# X – SERIES

The X-101 is the next generation of the popular X-100 model. The X-101 now has CAN bus built in and is a higher density lithium battery, using advanced cell technology.

## X-101

5.5kWh | 48V

- + 1C Rating
- + Cloudlink-ready
- + 10 Year Warranty (Ts & Cs Apply)
- + Internal Fire Suppression System
- + Parallel Up To 15 Units With Full Comms



Item	Specifications
Model	Hubble X-101
Nominal Energy	5.5 kWh
*Rated Capacity	116 Ah
Nominal Voltage	48 V
Equalized Charge Voltage	53.8 V
Max. Continuous Charging Current	105 A
Max. Continuous Discharging Current	105 A
C Rating	1.0 C
Depth of Discharge	100%
Weight	Approx. 42 Kg
Monitoring	Optional Cloudlink
Parallel	Parallel connection up to 15 packs with full communications
Dimensions (WxDxH) mm	442mm x 495mm x 177.5mm
Ports	1x CAN-bus, 2x Battery Link Ports
Cells	New Li-ion Prismatic Cells
Design Life	+/- 15 Years
Cycle Life @ 1C	+/- 6000 Cycles @ 50% DOD, Above 3000 cycles @ 100% DOD
Outer Package Material	White bake lacquer steel case
Operating Temperature	Charging: 0 to +55°C   Discharging: -20 to +55°C   Storage: -20 to +55°C
Protection	Electronic Circuit Breaker, BMS Voltage Protection, Current Limiting
Certification	CE, UN38.3, GBT31484-2015, GBT31485-2015, GBT31486-2015

\* Due to continuous product improvements specifications are subject to change without prior notice.

\*\* To prolong battery life the recommended charge current is 30A.

\*\*\* Ah design capacity nominally is between 110Ah and 120Ah.

# AM – SERIES

The any mount series of lithium batteries range from 2.75kWh – 10kWh and are designed with industry leading first life prismatic lithium cells. Easily wall mounted or shelf installed in a standard rack. The newly launched AM-10+ series features an integrated Cloudlink, providing remote monitoring capabilities.

## AM-2

5.5kWh | 48V

- + 1C Rating
- + Cloudlink-ready
- + 10 Year Warranty (Ts & Cs Apply)
- + Internal Fire Suppression System
- + Parallel Up To 15 Units With Full Comms



## AM-4

3kWh | 25V

- + 1C Rating
- + Cloudlink-ready
- + 10 Year Warranty (Ts & Cs Apply)
- + Internal Fire Suppression System
- + Parallel Up To 15 Units With Full Comms



Item	AM-2	AM-4
Nominal Energy	5.5 kWh	3 kWh
*Rated Capacity	116 Ah	120 Ah
Nominal Voltage	48 V	25 V
Equalized Charge Voltage	53.8 V	29 V
Max. Continuous Charging Current	105 A	100 A
Max. Continuous Discharging Current	105 A	115 A
Depth of Discharge	100%	
C Rating	1.0 C	
Cells	New Li-ion Prismatic Cells	
Cycle Life @ 1C	+/- 6000 Cycles @ 50% DOD, Above 3000 cycles @ 100% DOD	
Design Life	+/- 15 Years	
Parallel	Parallel connection up to 15 packs with full communications	
Ports	1x CAN-bus, 2x Battery Link Ports	
Protection	Electronic Circuit Breaker, BMS Voltage Protection, Current Limiting	
Operating Temperature	Charging: 0 to +55°C Discharging: -20 to +55°C Storage: -20 to +55°C	Charging: 0 to +55°C Discharging: -10 to +55°C Storage: -10 to +55°C
Weight	Approx. 42 Kg	Approx. 21 Kg
Dimensions (WxDxH) mm	375mm x 145mm x 467mm	375mm x 147mm x 371mm
Outer Package Material	White bake lacquer steel case	
Certification	CE, UN38.3, GBT31484-2015, GBT31485-2015, GBT31486-2015	

### AM-2:

- \* Due to continuous product improvements specifications are subject to change without prior notice.
- \*\* To prolong battery life the recommended charge current is 30A.
- \*\*\* Ah design capacity nominally is between 110Ah and 120Ah.

### AM-4:

- \* Due to continuous product improvements specifications are subject to change without prior notice.
- \*\* To prolong battery life the recommended charge current is 30A.



# AM-5

5.12kWh | 51.2V

- + 1C Rating
- + Cloudlink-ready
- + LFP Prismatic Cells
- + Parallel Up To 8 Units With Full Comms
- + Unlimited Cycle Warranty (Ts & Cs Apply)



Item	AM-5
Nominal Energy	5.12 kWh
*Rated Capacity	100 Ah
Nominal Voltage	51.2 V
Equalized Charge Voltage	55.2 V
Max. Continuous Charging Current	100 A
Max. Continuous Discharging Current	100 A
Depth of Discharge	100%
C Rating	1.0 C
Cells	New Li-ion Prismatic Cells
Cycle Life @ 1C	Unlimited cycles within the Hubble Energy 10 year warranty (Ts & Cs Apply)
Design Life	+/- 15 Years
Parallel	Parallel connection up to 8 packs with full communications
Ports	CAN-bus, Battery link ports
Protection	Electronic Circuit Breaker, BMS Voltage Protection, Current Limiting
Operating Temperature	Charging: -10 to +50°C Discharging: 10 to +50°C Humidity: 15% to 75%
Weight	Approx. 51 Kg
Dimensions (WxDxH) mm	509.62mm x 173mm x 599.67mm
Outer Package Material	White bake lacquer steel case
Certification	CE IEC UN38.3

**AM-5:**

\* Due to continuous product improvements specifications are subject to change without prior notice.

\*\* To prolong battery life the recommended charge current is 30A.

# AM – SERIES

## AM10+

10kWh | 51.2V

- + 1C Rating
- + Built-in Cloudlink
- + Prismatic LiFePO4 Cells
- + Scalable System (Up to 15 Units)
- + Informative RGB LED Display Strip
- + Unlimited Cycle Warranty (Ts & Cs Apply)



Compatible with AM-10 (with Cloudlink)

### Battery Parameter

### Specification

Model	Hubble AM-10+
Nominal Energy	10 kWh
*Rated Capacity	200 Ah
Nominal Voltage	51.2 V
Battery Type	LiFePO4 (LFP) 16 Cells per Battery
Operating Voltage Range	43.2 Vdc – 58.4 Vdc
Charging Voltage	55.2 Vdc
Charge Current (A)	115 A max
Discharge Current (A)	200 A max
Cycle Life @ 1C	Unlimited cycles within the Hubble Energy 10 year warranty (Ts & Cs Apply)
Design Lifetime	15 Years

### Battery Management System (BMS)

Power (Self-Consumption)	≤ 2 W
Cell Balancing (Charging Mode)	Passive - Activated once cells are close to full charge voltage.
Intelligent Current Limiter	Limits charging current to 20 A if it exceeds 200 A.
Protection	Over Charge; Over Discharge; Over Current; Short Circuit; Over and Under Temperature

### Cloudlink (Monitoring)

Power (Self-Consumption)	≤ 2 W
Wi-Fi Protocol	802.11 b/g/n/e/i (802.11n up to 150 Mbps)
Communication	CAN / RS485 / RS232

### Physical

Dimensions	675 * 510 * 230mm (Height, Width, Depth)
Weight	89 kg
Installation Mounting	Wall Mounted - Mounting Bracket

### Environmental

Operating Temperature	-10 °C to 50 °C
Storage Temperature	10 °C to 50 °C
Humidity	15% to 75%
Certification	CE IEC UN38.3

\* Due to continuous product improvements specifications are subject to change without prior notice.

\*\* To prolong battery life the recommended charge current is 60A.


# BLADE

The Blade Battery features revolutionary blade cell technology, which is known to be the safest in the industry. Providing an incredible 10kW and 51.2 voltage power, this 1.5C battery is leading the energy industry with ground-breaking performance.

## BLADE

7kWh | 10kW | 51.2V

- + 1.5C Rating
- + Built-in Cloudlink
- + Blade Cells (Safest In The Industry)
- + Parallel Up To 15 Units With Full Comms
- + Unlimited Cycle Warranty (Ts & Cs Apply)



Item	Specifications
Model	Hubble Blade
Nominal Energy	7.2 kWh
*Rated Capacity	137 Ah
Nominal Voltage	51.2 V
Equalized Charge Voltage	55.8 V
Max. Continuous Charging Current	140 A
Max. Continuous Discharging Current	200 A
C Rating	1.5 C
Depth of Discharge	100%
Weight	Approx. 64 Kg
Monitoring	Built-in Wi-Fi enabled cloud monitoring
Parallel	Parallel connection up to 15 packs with full communications
Dimensions (WxDxH) mm	1125mm x 175mm x 340mm
Ports	1x CAN-bus, 2x Battery Link Ports
Cells	16 Cells. New Li-ion LiFePO4 Blade Prismatic Cells
Design Life	+/- 15 Years
Cycle Life @ 1C	Unlimited cycles within the Hubble Energy 10 year warranty (Ts & Cs Apply)
Outer Package Material	White bake lacquer steel case
Operating Temperature	Charging: -20 to +55°C   Discharging: -30 to +55°C   Storage: -30 to +55°C
Protection	Electronic Circuit Breaker, BMS Voltage Protection, Current Limiting
Certification	CE IEC UN38.3

\* Due to continuous product improvements specifications are subject to change without prior notice.

\*\* To prolong battery life the recommended charge current is 50A.

