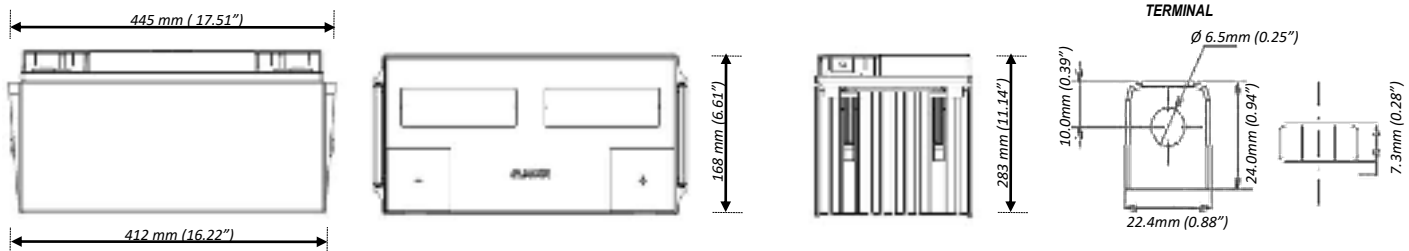


# HUPS 12V – 160AH

“Introducing **Amaron QUANTA – HUPS**, is an outcome of changing need of customers demand for more cyclic usage from a battery, backed by over 30 years of experience in industrial and manufacturing of batteries. It is featuring higher cyclic life in 12V monobloc modules, suitable for deep discharge with enhanced performance, ensured reliability for Home and Office use of application, promise to deliver up to 40% more cyclic life than regular Amaron Quanta batteries.

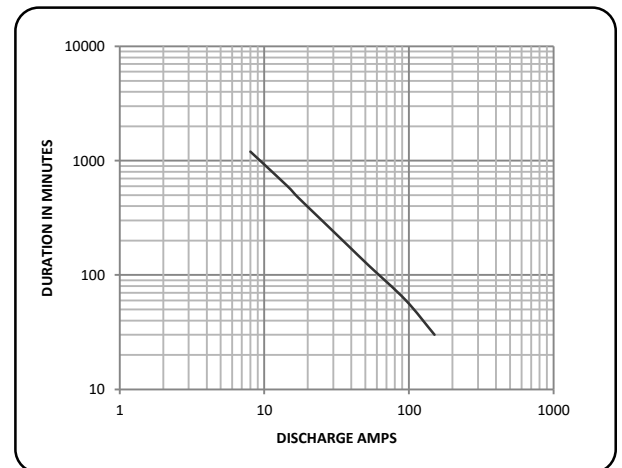
**Amaron Quanta – HUPS** range of valve regulated lead acid batteries has been designed to offer superior solutions for the HUPS Application; **Amaron Quanta HUPS** batteries are the latest additions to the highly successful, high power density range from Amaron Quanta batteries. It ensures fast charging with high efficiency on resumption of power.”

## Dimensions



## Specification

Nominal Voltage	12V	
Rated Capacity@C20 hr	160Ah at 27°C	
Dimensions	Length	445±2mm (17.51±0.08inches)
	Width	168±2mm (6.61±0.08inches)
	Total Height	283±2mm (11.14±0.08inches)
Battery Weight (Kg)	48.30	
Terminal Type	M6 L-Terminal	
Internal resistance	5.35 mΩ (Fully charged battery 27°C/80.6°F)	
Short Circuit Current	2380A	
Capacity affected w.r.t., Temperature @C20 Hr Rate	40°C (104°F)	110%
	27°C (80.6°F)	100%
	0°C (32°F)	80%
	-15°C (5°F)	60%
Self discharge 27°C(80.6°F)	After 3 months storage	90%
	After 6 months storage	80%



## Charging Instructions

### Constant voltage charging at 27°C

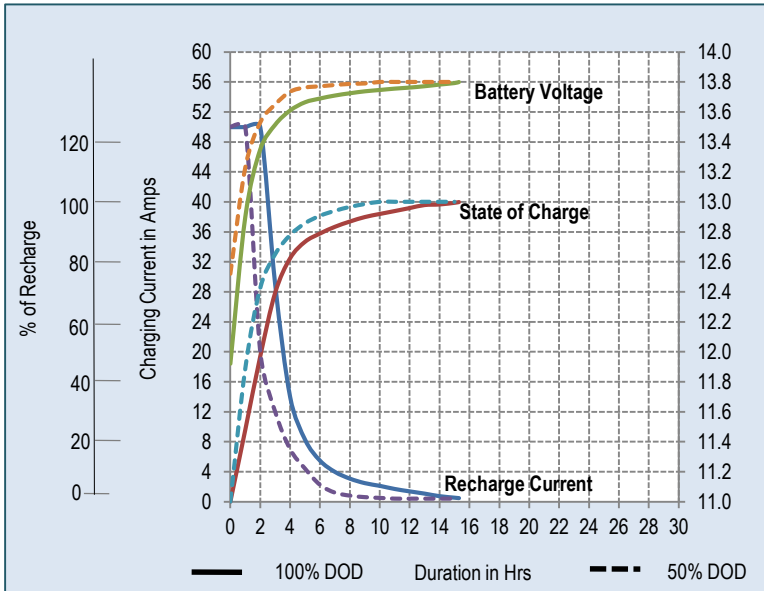
- Float Voltage : Charging voltage 13.5V/battery
- Boost voltage : Charging voltage 13.8V/Battery
- Recommended Charging current : Max 25% of Rated capacity
- Temperature compensation : 18 mV/battery/°C
- String Equalization charge in boost mode (13.8V/module) once in 3 months for 24Hrs

### Constant power discharge rating watts per module @ 27°C\*

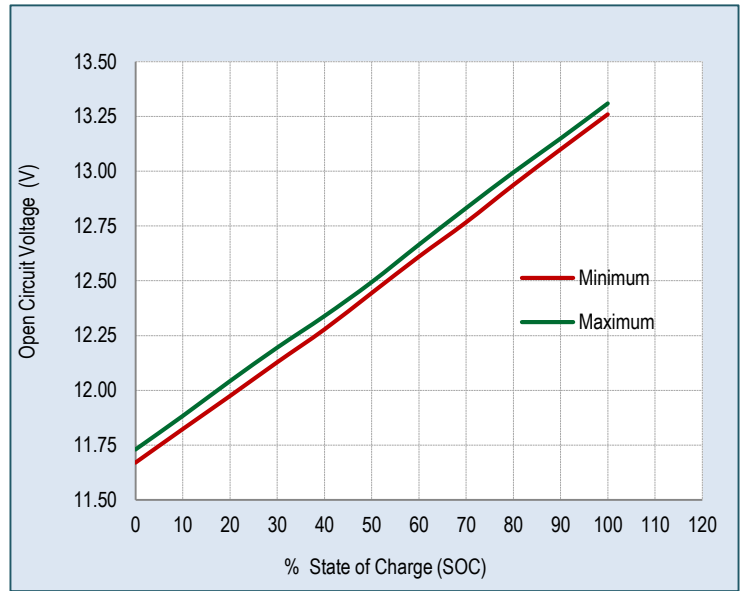
EMV	Duration					
	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
10.20	1691	1084	479	315	171	92
10.50	1660	1050	475	310	170	90
10.80	1629	1016	471	305	169	88

\*Note: 1. The above data are average values per battery and can be obtained within five charge/discharge cycles.  
 2. A tolerance of ±5% is applicable for the above constant power discharge and constant current discharge values.  
 3. Recommended to follow IEEE - 485 Standard for Battery sizing (In terms of Aging Margin, Design Margin) for Optimal Performance & Life.  
 4. Considerable Voltage drop across cables, if any shall be considering during battery sizing.

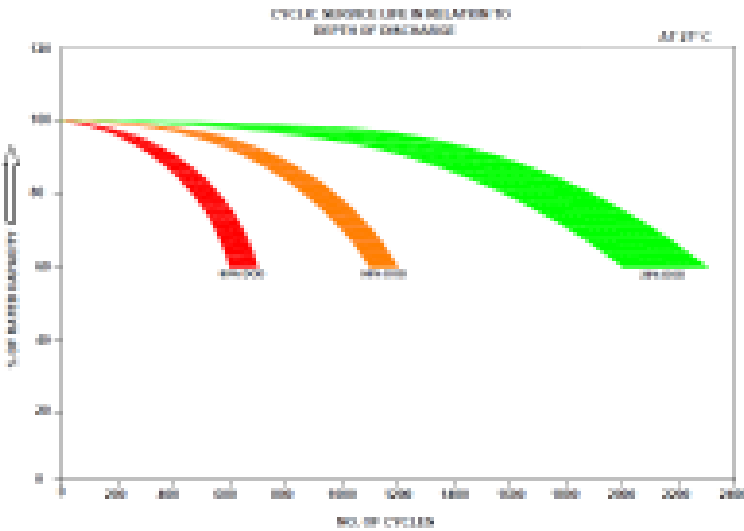
### Constant voltage charging characteristics at 27°C



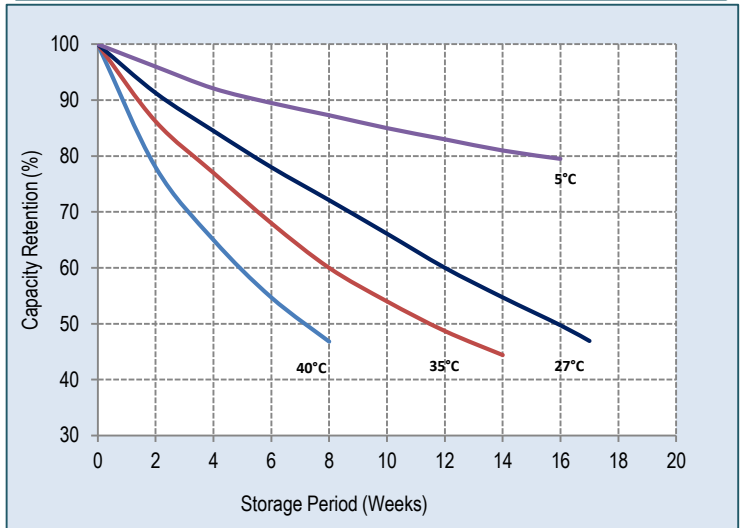
### State of Charge Vs OCV



### Cyclic Life Characteristics



### Shelf Life Characteristics at Various Ambient Temperatures



### International Compliance

- Compliance to JISC8702 Standard
- Complies to UL
- Complies CE Marking \*

### Quality Edge

- ISO 9001: 2015
- ISO 14001: 2015
- OHSAS 18001:2007

### Reach us

#### AMARA RAJA BATTERIES LTD

##### ● Regd. Office (Manufacturing facility & Central Distribution Center)

Karakambadi - 517520, Tirupathi – AP , INDIA , TEL:+91-877-2265000 FAX:+91-877-2285600, E-Mail: amararaja@amararaja.com

##### ● Corporate Office

Terminal A, 1-18/1/AMR/NR, Nanakramguda ,Gachibowli, Hyderabad-500032, INDIA, E-Mail: mktg@amararaja.com

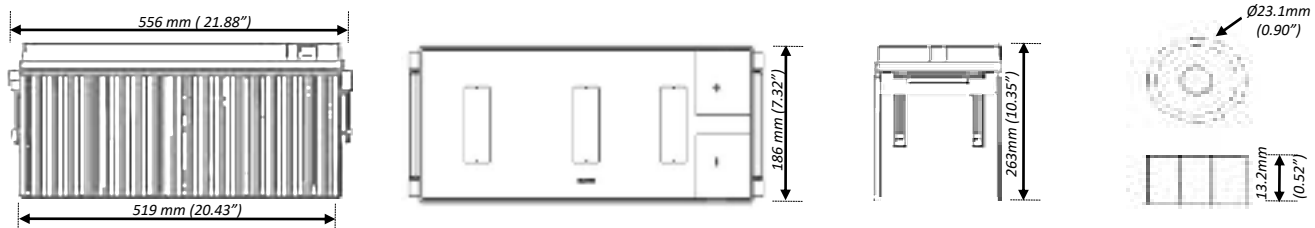
\*Note: CE Marking under progress

# HUPS 12V – 200AH

“Introducing **Amaron QUANTA – HUPS**, is an outcome of changing need of customers demand for more cyclic usage from a battery, backed by over 30 years of experience in industrial and manufacturing of batteries. It is featuring higher cyclic life in 12V monobloc modules, suitable for deep discharge with enhanced performance, ensured reliability for Home and Office use of application, promise to deliver up to 40% more cyclic life than regular Amaron Quanta batteries.

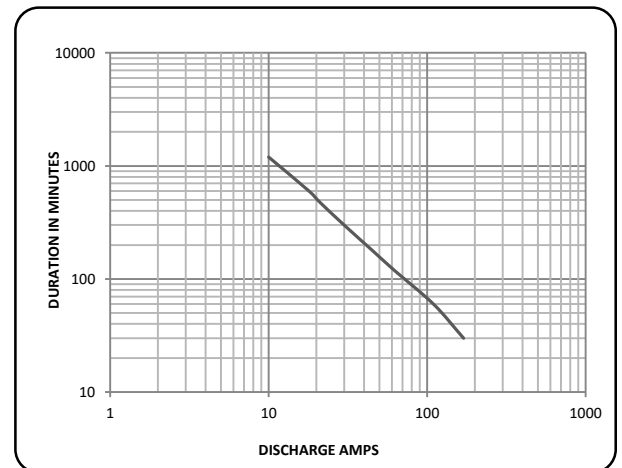
**Amaron Quanta – HUPS** range of valve regulated lead acid batteries has been designed to offer superior solutions for the HUPS Application; **Amaron Quanta HUPS** batteries are the latest additions to the highly successful, high power density range from Amaron Quanta batteries. It ensures fast charging with high efficiency on resumption of power.”

## Dimensions



## Specification

Nominal Voltage	12V	
Rated Capacity@C20 hr	200Ah at 27°C	
Dimensions	Length	556±2mm (21.88±0.08inches)
	Width	186±2mm (7.32±0.08inches)
	Total Height	263±2mm (10.35±0.08inches)
Battery Weight (Kg)	61.0	
Terminal Type	M8 x 25 mm Copper Terminal	
Internal resistance	3.71 mΩ (Fully charged battery 27°C/80.6°F)	
Short Circuit Current	3390A	
Capacity affected w.r.t., Temperature @C20 Hr Rate	40°C (104°F)	110%
	27°C (80.6°F)	100%
	0°C (32°F)	80%
	-15°C (5°F)	60%
Self discharge 27°C(80.6°F)	After 3 months storage	90%
	After 6 months storage	80%



## Charging Instructions

### Constant voltage charging at 27°C

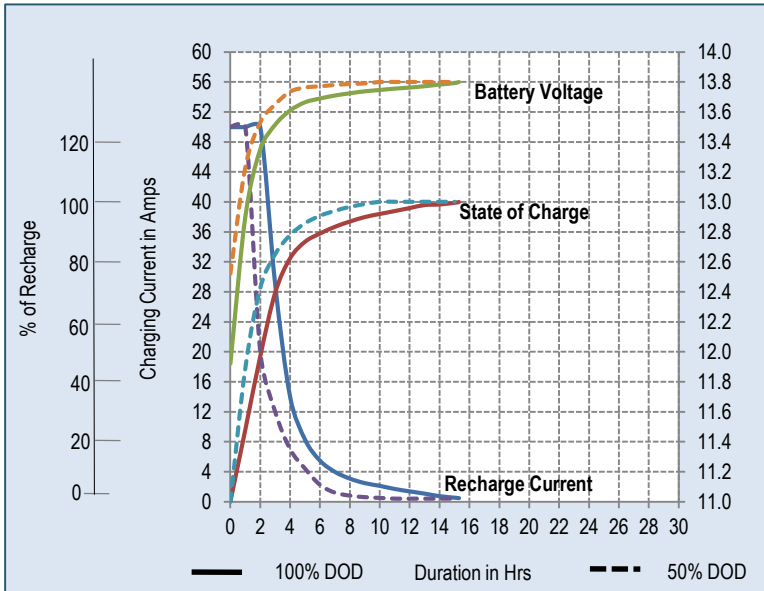
- Float Voltage : Charging voltage 13.5V/battery
- Boost voltage : Charging voltage 13.8V/Battery
- Recommended Charging current : Max 25% of Rated capacity
- Temperature compensation : 18 mV/battery/°C
- String Equalization charge in boost mode (13.8V/module) once in 3 months for 24Hrs

### Constant power discharge rating watts per module @ 27°C\*

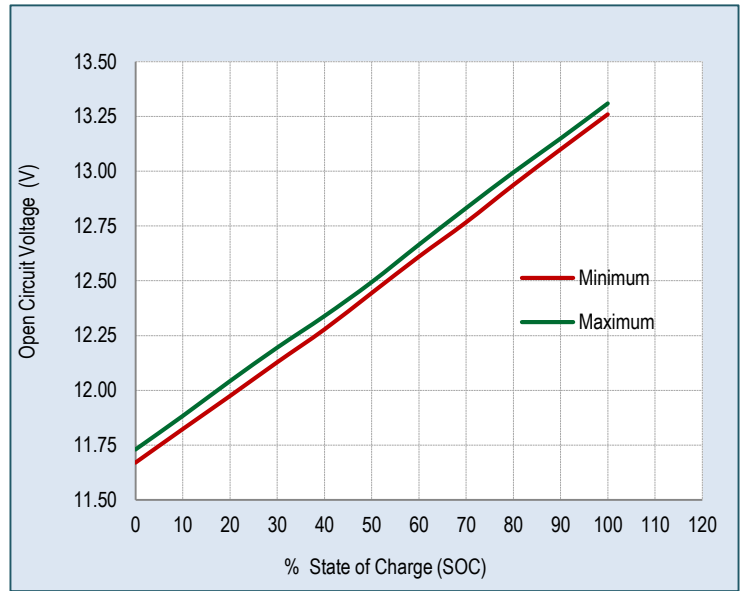
EMV	Duration					
	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
10.20	2085	1300	572	354	204	102
10.50	2050	1260	565	348	198	100
10.80	2014	1219	558	340	192	98

\*Note: 1. The above data are average values per battery and can be obtained within five charge/discharge cycles.  
 2. A tolerance of ±5% is applicable for the above constant power discharge and constant current discharge values.  
 3. Recommended to follow IEEE - 485 Standard for Battery sizing (In terms of Aging Margin, Design Margin) for Optimal Performance & Life.  
 4. Considerable Voltage drop across cables, if any shall be considering during battery sizing.

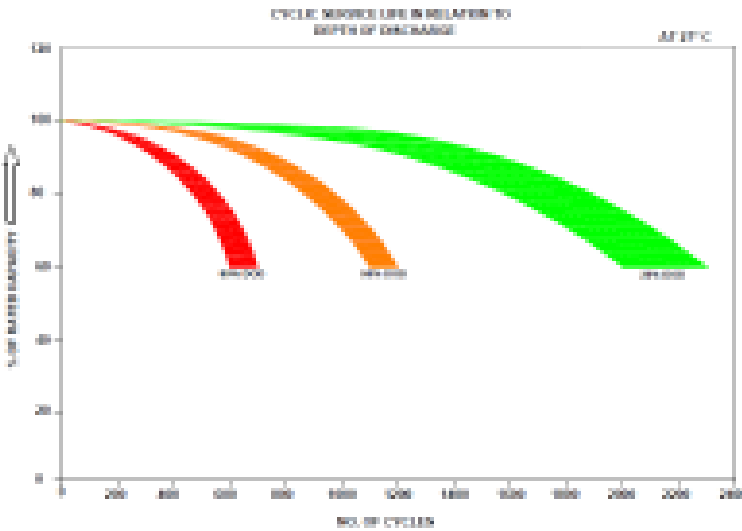
### Constant voltage charging characteristics at 27°C



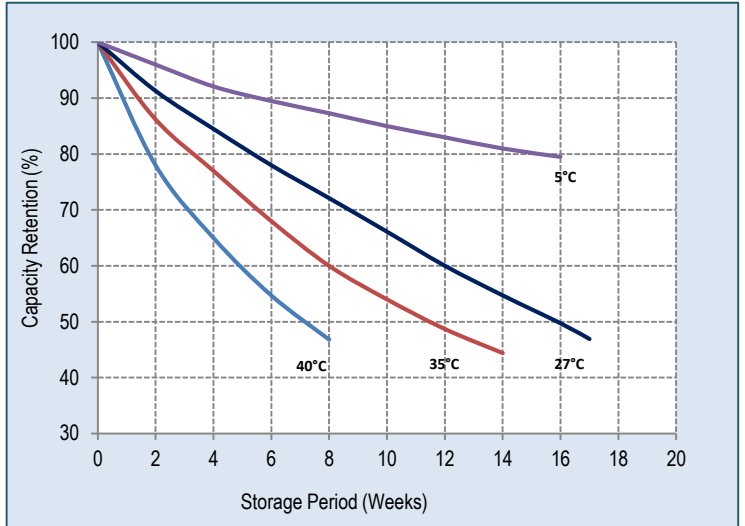
### State of Charge Vs OCV



### Cyclic Life Characteristics



### Shelf Life Characteristics at Various Ambient Temperatures



### International Compliance

- Compliance to JISC8702 Standard
- Complies to UL
- Complies CE Marking \*

### Quality Edge

- ISO 9001: 2015
- ISO 14001: 2015
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\*Note: CE Marking under progress