

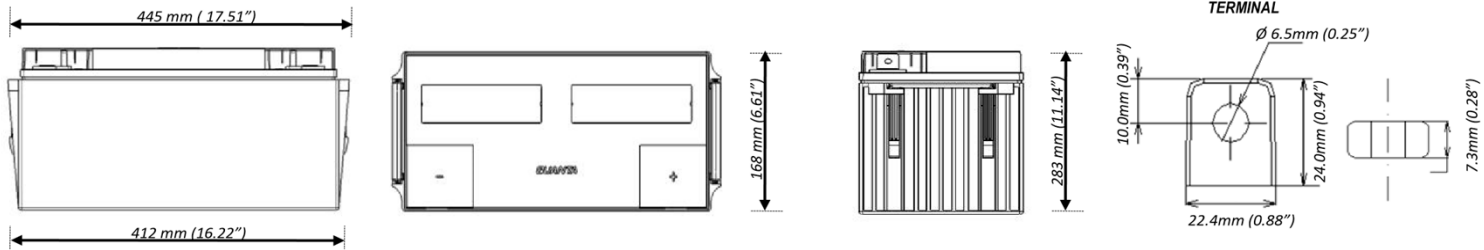
HUPS 12V-160AH

Introduction

“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.

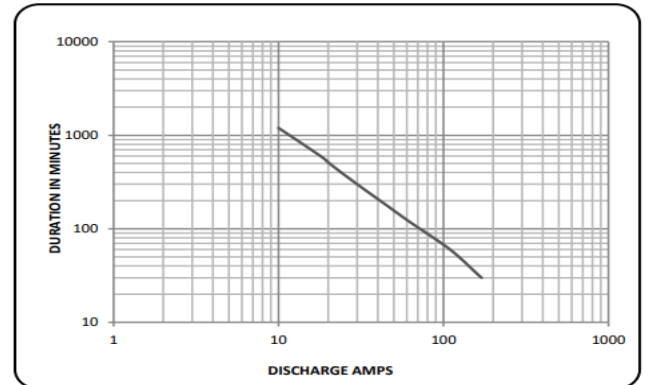
Amaron Quanta – HUPS range of valve regulated lead acid batteries has been designed to offer superior solutions for the HUPS Application; Amaron Quanta HUPS batteries are the latest additions to the highly successful, high power density range from Amaron Quanta batteries. It ensures fast charging with 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)±5%	52.0 Kg (114.64 lbs)		
Terminal Type	M6 L-Terminal		
Internal resistance	4.35 mΩ (Fully charged battery 27°C/80.6°F)		
Short Circuit Current	2984 A		
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

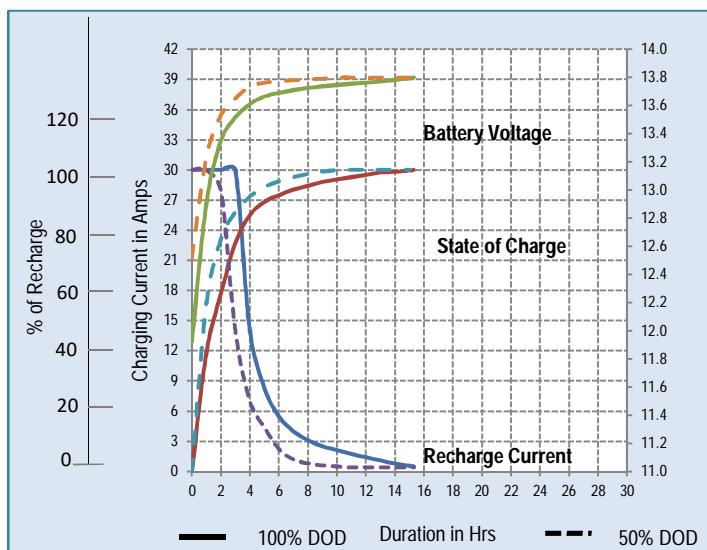
Constant power discharge rating watts per module @ 27 °C*

EMV	Duration					
	30min	1 Hr	3 Hr	5Hr	10 Hr	20Hr
10.20	1856	1094	489	333.0	181.0	96.0
10.50	1824	1060	485	327.5	179.5	95.5
10.80	1792	1026	481	322.0	178.0	95.0

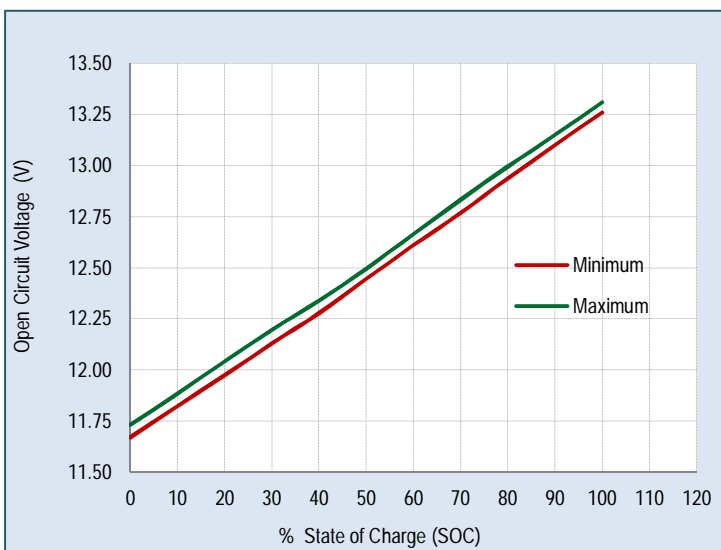
*Note: 1. The above data are average values per battery and can be obtained within five charge/discharge cycles.
 2. A tolerance of ±5% is applicable for the above constant power discharge and constant current discharge values.
 3. Recommended to follow IEEE - 485 Standard for Battery sizing (In terms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

**Design improvement is a continuous process of Amara Raja. As a result, specifications are subject to change without prior notice

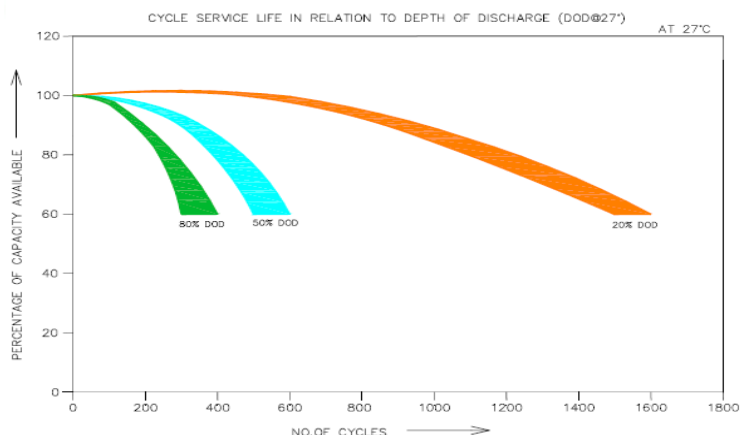
Constant voltage charging characteristics at 27°C



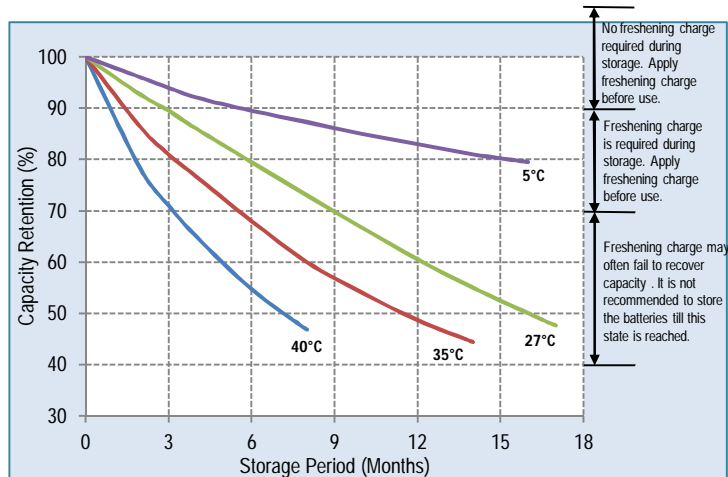
State of Charge Vs OCV



Cyclic Life Characteristics



Shelf Life Characteristics at Various Ambient Temperatures



International Compliance

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

*Note: CE Marking under progress

Quality Edge

- ISO 9001: 2015
- ISO 14001: 2015
- ISO 45001 : 2018

AMARA RAJA ENERGY & MOBILITY LIMITED (Formerly Known as Amara Raja Batteries Limited)

- Corporate Operations Office:**
 Terminal A, 1-18/1/AMR/NR, Nanakramguda, Gachibowli, Hyderabad-500032, INDIA, E-Mail: mktg@amararaja.com
www.amararajaeandm.com
- Registered Office & Manufacturing Facility-1:**
 UNIT-I, Karakambadi - 517520, Tirupati, Andhra Pradesh, India, TEL: +91-877-2265000, FAX: +91-877-2285600
- Manufacturing Facility-2**
 UNIT-II, Nunegundlapalle, Bangarupalyam, Chittoor - 517416. Andhra Pradesh, India