

12HWS - 440W

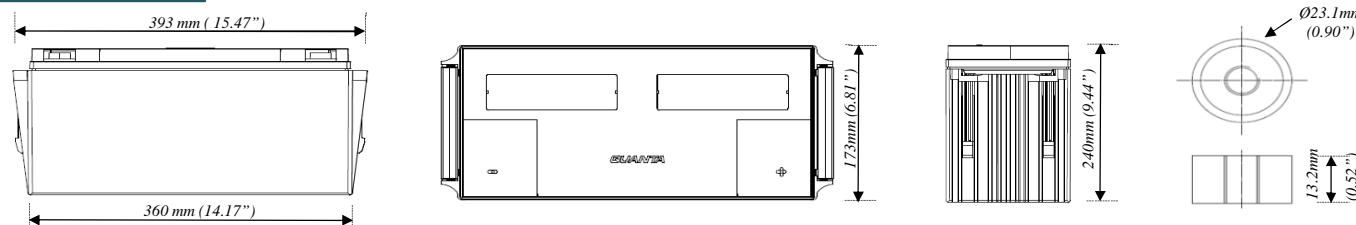
High Wattage Series VRLA AGM Batteries

Introduction

Introducing Amaron QUANTA - HWS Batteries, based on a number of newer paradigms in technology and designed with the best grid pasting technology delivering upto 25% more power than AL –series Quanta battery.

Amaron QUANTA - HWS has been designed to exacting standard at our state of the art facility with an emphasis on reliability which is our hallmark. Uniquely built, Amaron QUANTA - HWS promises instant discharge negating the usual downtime in mission critical applications. Besides it also ensures fast charging with high efficiency on resumption of power & lower operating costs make Amaron QUANTA – HWS an ideal choice for a host of critical power applications especially in the IT & ITES segment (DATA center) and process industries.

Dimensions



Specification

Nominal Voltage	12V	
Power / Cell	440Watts @ 15mins to 1.67ECV at 27°C	
Dimensions	Length	393±2mm(15.47±0.08inches)
	Width	173±2mm (6.81±0.08inches)
	Total Height	240±2mm (8.70±0.08inches)
Specific Power (W/kg)	68.0	
Terminal Type	M8 x 25 mm Copper Terminal	
Internal resistance	4.90 mΩ (Fully charged battery 27°C/80.6°F)	
Short Circuit Current	2600A	
Power Vs. Temperature	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%

Features & Benefits

- Delivers upto 25% more power as compared to regular SMF Battery
- Lower IR Values results in 10% quick recharge
- High Volumetric Energy Density in 10% minimal room space.
- 15% High specific power results in low floor loading than regular SMF battery.
- Batteries can be sized & discharged upto 1.67 EC
- Design Float Life of 8 to 10 Years @ 27°C
- **Plus the time proven QUANTA features, advantages & Reliability**

Charging Instructions

Constant voltage charging at 27°C

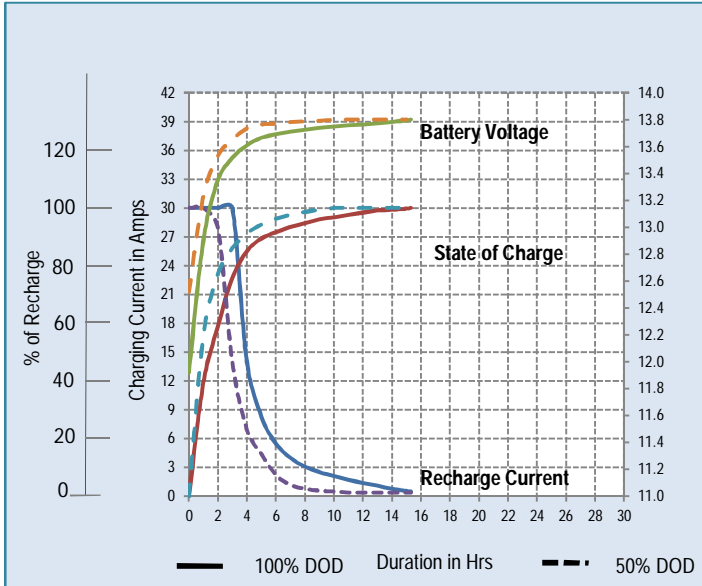
- Float Voltage : Charging voltage 13.5V/battery
- Boost voltage : Charging voltage 13.8V/Battery
- Recommended Charging current : Min.14.4 Amps to Max. 36 Amps
- Temperature compensation : 18 mV/battery/°C
- String Equalization charge in boost mode (13.8V/module) once in 3 months for 24Hrs

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

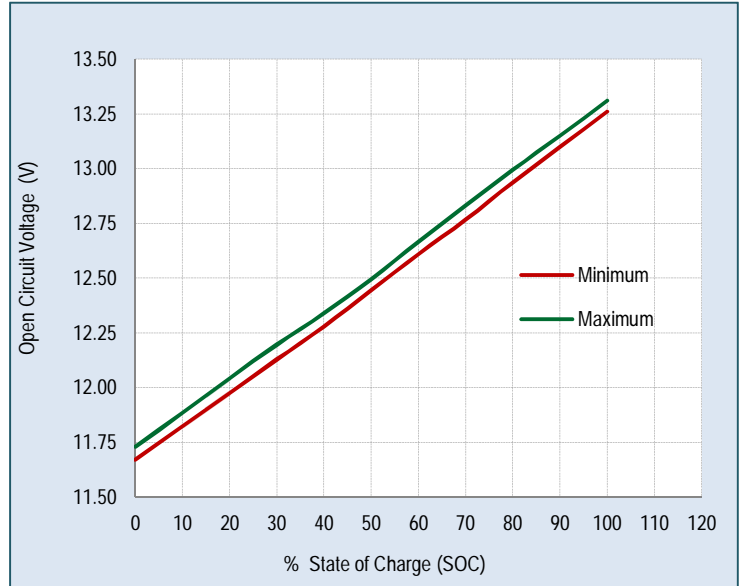
EMV	Duration						
	5 min	10 min	15 min	20 min	25 min	30 min	60 min
10.02	3950	3050	2640	2250	1900	1670	940
10.20	3920	3030	2620	2180	1850	1650	900
10.50	3850	2900	2600	2060	1750	1630	860
10.80	3750	2760	2400	1980	1680	1600	830

*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



Installation Considerations

- Terminal Tightness : 13N-m
- Cable Size consideration : Max.2Amps/sq.mm
- Recommended cable drop : <20mV/meter (or) less than 1V for 360V & above Systems

International Compliance

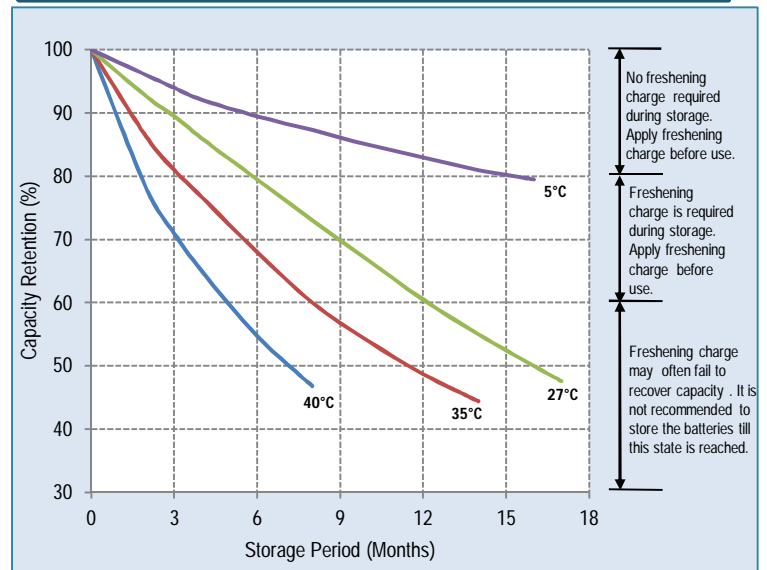
- Compliance to JISC8702 Standard
- Complies to UL
- Complies CE Marking*

Quality Edge

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

*Note: CE Marking under progress

Shelf Life Characteristics at Various Ambient Temperatures



AMARA RAJA BATTERIES LIMITED

- CORPORATE OPERATIONS OFFICE:**
Terminal A, 1-18/1/AMR/NR, Nanakramguda, Gachibowli, Hyderabad-500032, INDIA. E-Mail: mkte@amararaja.com
www.amararajabatteries.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

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