

# 12HWS - 730W

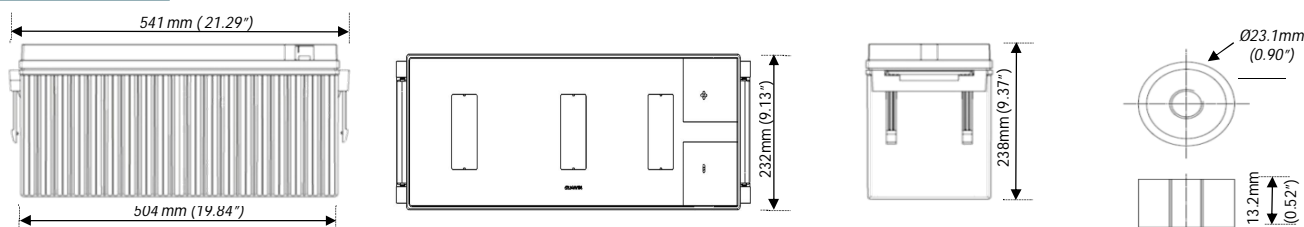
# High Wattage Series VRLA AGM Batteries

## 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	730Watts @ 15mins to 1.67ECV at 27°C	
Dimensions	Length	541±2mm (21.29±0.08inches)
	Width	232±2mm (9.13±0.08inches)
	Total Height	238±2mm (9.37±0.08inches)
Specific Power (W/kg)	68.0	
Terminal Type	M8 x 25 mm Copper Terminal	
Internal resistance	3.20 mΩ (Fully charged battery 27°C/80.6°F)	
Short Circuit Current	3655A	
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 ECV
- 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

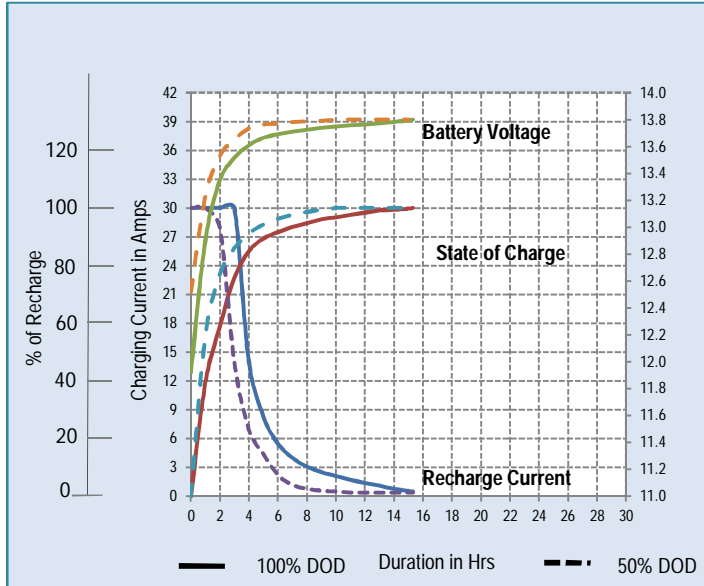
- Float Voltage : Charging voltage 13.5V/battery
- Boost voltage : Charging voltage 13.8V/Battery
- Recommended Charging current : Min.24 Amps to Max. 60 Amps
- Temperature compensation : 18 mV/battery/°C
- String Equalization charge in boost mode (13.8V/module) once in 3 months for 24Hrs

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

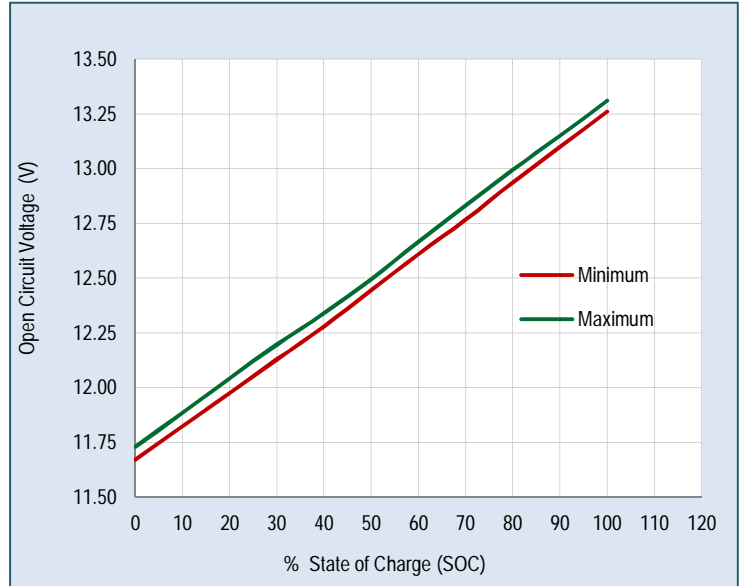
EMV	Duration						
	5 min	10 min	15 min	20 min	25 min	30 min	60 min
10.02	6450	5280	4380	3600	3100	2650	1510
10.20	6300	5200	4320	3500	3000	2590	1460
10.50	6100	5000	4098	3300	2800	2540	1410
10.80	5850	4800	3900	3050	2600	2460	1350

\*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

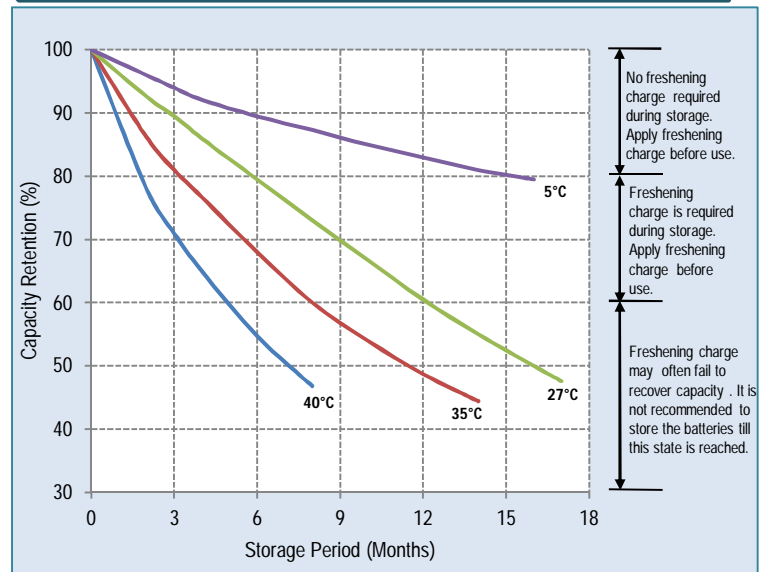
- Compliance to JISC8702 Standard
- Complies to UL
- Complies CE Marking\*

### 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](mailto:mkte@amararaja.com)  
[www.amararajabatteries.com](http://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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