

# Captivating Solar. Rendering Power.



AMARON CLIANTA



At Amara Raja, a bright future is real, living, functioning, and built every day. It is the guiding principle at Amara Raja, helping it to ceaselessly innovate and explore the new and the never before.

Amara Raja has put their vision into practice by striding forward in the power management industry and consolidating its position as one of the leading players in the Asia-pacific region. With Johnson Controls Inc., a world leader, as an Equity Alliance Partner (26%), Amara Raja pioneered the next generation battery technology in India. The collaboration facilitates knowledge sharing and innovations to accelerate and expand development efforts in the entire global battery market. It also enables harnessing technologies that acclimatize batteries to operate in harsh tropical conditions.

Working together closely with Johnson Controls, Amara Raja has set up India's finest battery plant in Tirupati, the first such facility for Johnson Controls in the last decade. Backed by one of the best inhouse Research & Development centers, the facility consistently thinks out-of-the-box to develop products and services that not only match the world-class standards, but also set new industry benchmarks. The Amara Raja Battery Excellence Center is another first one in India. Here, the products are put through rigorous tests to ensure that they comply with international standards and design requirements. Armed with state-of-the-art testing equipment, the Center evaluates batteries on parameters of performance, design and durability. While, application engineering, vehicle system study, simulations and computer-aided design, including a full calibration laboratory, complete the facility.

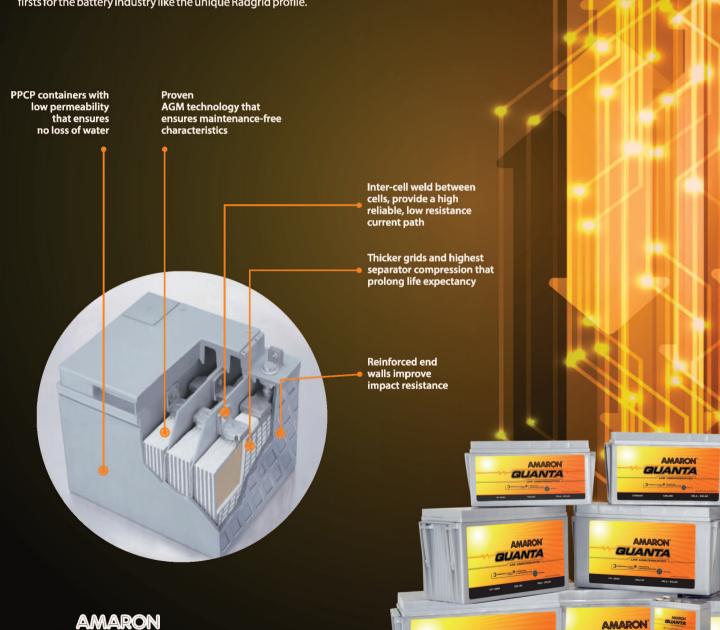
Amararaja Batteries Limited (ARBL) is a flagship company of Amararaja Group and is a pioneer and the largest manufacturer of Sealed Maintenance Free – Valve Regulated Lead Acid (SMF-VRLA) batteries in the Indian Ocean Rim area. Established about three decades ago, Amararaja has emerged as one of the top ten industrial battery manufacturers in the world, for this technology and being a leader in Indian back-up power solution providers. ARBL enjoys a dominant market share in standby batteries across various sectors like Telecom, Railways, UPS, etc. in India.

- 800 acres of integrated battery manufacturing complex
- Largest manufacturing range from 7Ah to 6000Ah
- ARBL backs more than half of Indian telecom tower
- Every 3<sup>rd</sup> car powered by Amaron battery
- Johnson Controls Inc. (JCI) is the world's largest battery manufacturer
- With \$42.7 billion turnover in FY13, JCI is ranked 67<sup>th</sup> among the Fortune 500

Solar systems are the most demanding applications for the battery and the correct choice of battery is fundamental to the integrity of the entire system. Batteries are subjected to high and low temperatures, unpredictable charging, daily cycling as well as potentially partial states of charges. The selection of the right battery for the right application is of utmost importance in order to maximize the battery life. Sensing the need of this enduring and reliable source of power, Amara Raja not only offers the complete range of Solar batteries available in the market but also provides expert advice on the choice of battery to suit your particular application.

Presenting Amaron Quanta Solar, the industrial segment SMF battery for Solar applications is built to perform. In short, the lifeline to your Solar applications.

Amaron Quanta, is a product of fail-safe, fool-proof battery technology, produced and tested in our premier manufacturing facility. Built to the highest technical competence in its class, the Amaron Quanta is an example of Amara Raja's commitment to bringing the best of technology to your table. It features several firsts for the battery industry like the unique Radgrid profile.



AMARON'

**CUANTA** 

**QUANTA** 



#### **PERFORMANCE FEATURES:**

- Robust, safe and reliable
- Suitable for PSOC and deep discharge
- Unique heavy duty corrosion-resistant alloy for positive grids to increase cyclic life in tropical environments
- Radgrid<sup>™</sup> profile providing lower internal resistance and performance
- Instacharge<sup>™</sup>, a patented paste recipe for excellent charge acceptance
- Low self-discharge rates ensures high charge retention
- · Design Float Life of 10 Years
- Clean and sleek looks
- Higher AH and WH efficiency
- Longer service life

### **QUALITY EDGE:**

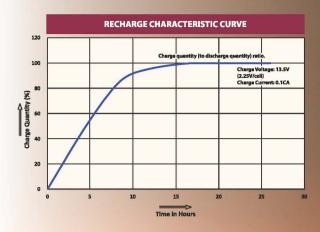
- ISO 9001 AND ISO/TS 16949 certified by RWTUV
- ISO 14001 certification signifying the environmental consciousness
- OHSAS 18001 certified
- · Implementation of Kaizen, Six Sigma programs

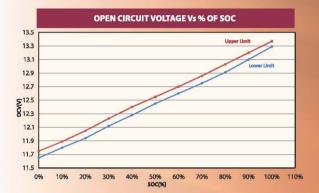
## **PRODUCT APPROVALS:**

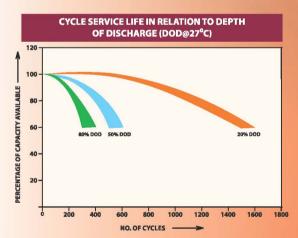
- Conforms to IS 15549:2005
- Conforms to international standards- JIS 8702C
- UL approved
- DGS&D approved
- MNRE approved
- Conforms to IEC60896

#### **APPLICATIONS:**

- Solar Lantern Solar Street Light Solar Home Light
- Rural Electrification Traffic Light Telecommunication
- Offshore Platforms Railway Signaling Hybrid Power Plant
- Navigation Aids









# METHOD: CONSTANT POTENTIAL CURRENT LIMITED

Charge provision	Charging voltage	Maximum charging current (Amps)		
Dual Mode charge:				
Float charge	13.5±0.1V	0.2C		
Boost charge	13.9±0.1V	0.2C		
Single mode charge:				
Fixed voltage charge	13.7±0.1V	0.2C		

# MODULE SPECIFICATION

Model Nominal Voltage (V)	100000000000000000000000000000000000000	27°C at 10.50 EMV		Length ±2mm	Width ±2mm	Height ±2mm	Weight in Kgs ±5%
	AH @ C20	AH @ 10					
12SL026	12	26	20	167	126	175	9.0
125L042	12	42	40	199	167	175	14.0
12SL065	12	65	60	351	167	175	20.0
12SL080	12	84	75	351	167	203	27.0
12SL100	12	100	90	393	173	221	32.5
12SL120	12	120	110	393	173	240	36.6
12SL130	12	130	120	445	168	247	42.0
12SL150	12	150	140	453	173	251	45.0
12SL160	12	160	150	445	168	283	52.0
12SL200	12	200	185	556	186	263	62.0

Also available in 7.2 AH

To enhance life of battery the design parameters of Panel and operating environments should meet the Charge Balance more than or equal to 125% (i.e ratio of Kwh in and Kwh out)





**DIN EN ISO 9001: 2008** ISO/TS 16949: 2009 ISO 14001: 2004 OHSAS 18001: 2007

















## **AMARA RAJA BATTERIES LIMITED**

(An Amara Raja Johnson Controls Company)

## **CORPORATE OPERATIONS OFFICE:**

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