

12AL007

AMARON QUANTA™

The industrial segment SMF-VRLA (Valve Regulated Lead Acid) battery for UPS applications is built to perform.

In short, the lifeline to your UPS 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 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™



Specification

Nominal Voltage	12V
Rated Capacity	7Ah / C ₂₀ Hr / 1.75VPC / 27°C
Dimensions (±2mm)	Length 151 mm (5.94 in.) Width 65 mm (2.56 in.) Total Height 100 mm (3.94 in.)
Weight (±5%)	2.2 Kg (4.85 lbs)
Terminal Type	F1/F2 (Faston tab)
Capacity @ 27°C	6.40 Ah (10hr, 0.64 A, 10.5 V/battery) 5.90 Ah (5hr, 1.18 A, 10.2 V/battery) 4.23 Ah (1hr, 4.23 A, 9.6V /battery)
Case Material	Acrylonitrile Butadiene Styrene (ABS)
Internal Resistance (IR)	Approx. 25 mΩ for a fully charged battery (27°C)
Max. discharge current (5 sec)	105 A
Operating Temp. range	-20°C to +60°C (50 to 60°C for shorter duration)
Nominal Operating Temp. range	27°C ± 3°C
Standby use (27°C)	Charging Voltage 13.5 to 13.8V/battery Charging Current Max. 25% of rated capacity Temp. Compensation ± 18mV/battery/°C
Cyclic use (27°C)	Charging Voltage 14.4 to 14.7V/battery Charging Current Max. 25% of rated capacity Temp. Compensation ± 30mV/battery/°C
Self-Discharge	< 4% per month at 27°C

Constant Current discharge rating (amperes) @ 27°C *

ECV/ Time	10 min	15 min	30 min	60 min	2 hrs	3 hrs	5 hrs	10 hrs	20 hrs
1.60	15.33	12.29	7.35	4.23	2.52	1.80	1.26	0.67	0.38
1.70	14.39	11.24	6.72	4.09	2.34	1.70	1.18	0.66	0.37
1.75	13.86	10.92	6.62	4.00	2.29	1.65	1.12	0.64	0.35

Constant Power discharge rating (watts per battery) @ 27°C *

ECV/ Time	10 min	15 min	30 min	60 min	2 hrs	3 hrs	5 hrs	10 hrs	20 hrs
1.60	176.16	133.62	85.45	44.78	26.79	20.97	14.24	8.42	4.36
1.70	170.29	129.26	82.78	43.45	26.12	20.54	13.94	8.24	4.30
1.75	163.92	124.90	80.30	42.18	25.57	20.12	13.70	8.12	4.24

Note:

1. The above data are average values per battery and can be obtained within five charge/discharge cycle
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



CAUTION

- ⚡ Avoid short circuit
- ⚡ Don't charge in a sealed container



THE LONG LIFE UPS BATTERY



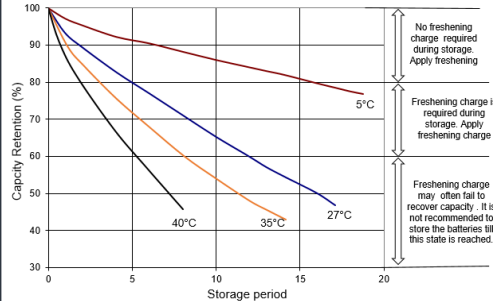
Features

- ✓ Proven AGM technology that ensures maintenance free characteristics
- ✓ Low self-discharge rates for extended storage periods
- ✓ Design float life of up to 6 years
- ✓ Clean and Sleek looks

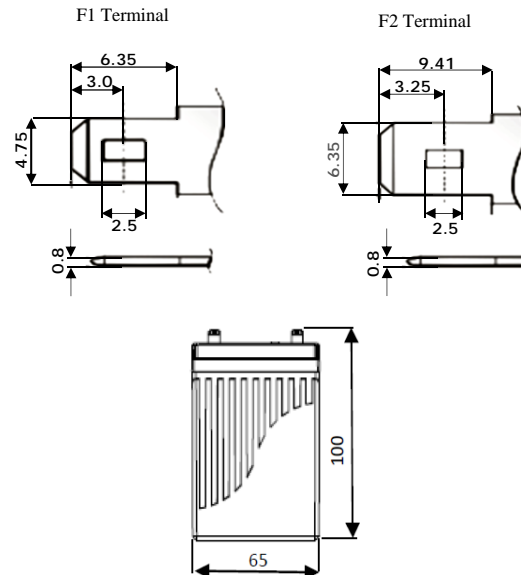
Compliance

- ✓ Complies to JIS C 8702
- ✓ UL (UL-1989) & CE Certified
- ✓ Complies to IEC 61056
- ✓ Complies to IEC 60896

Shelf Life Characteristics



Battery Layout



Applications

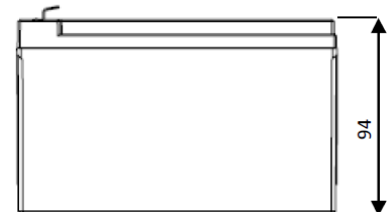
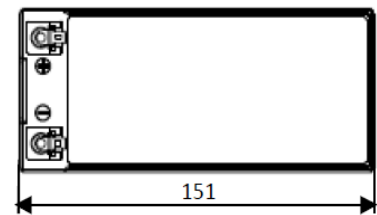
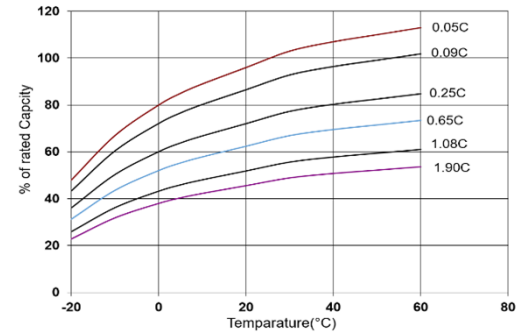
- ✓ Small UPS System
- ✓ Emergency Lighting
- ✓ Fire Alarm System
- ✓ Safety, Surveillance & Security Systems
- ✓ Medical Equipment

Quality Standards

Manufactured in best-in-class facility certified to

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

Temperature Effect on Capacity



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](mailto:mktg@amararaja.com)
www.amararajaandm.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

