

12AL018



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	18Ah / C ₂₀ Hr / 1.75VPC / 27°C
Dimensions (±2mm)	Length 181mm (7.12 in.)
	Width 77mm (3.03 in.)
	Total Height 167mm (6.57 in.)
Weight (±5%)	5.52 Kg (12.16 lbs.)
Terminal Type	M5 Bolted
Capacity @ 27°C	16.80 Ah (10hr, 1.68 A, 10.5 V/battery)
	15.40 Ah (5hr, 3.08A , 10.2 V/battery)
	11.25 Ah (1hr,11.25A,9.6V/battery)
Case Material	Acrylonitrile Butadiene Styrene (ABS)
Internal Resistance (IR)	Approx. 14 mΩ for a fully charged battery (27°C)
Max. discharge current (5 sec)	270 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	20hrs
1.60	41.87	33.46	20.16	12.04	7.30	5.00	3.44	1.75	0.96
1.70	39.33	30.59	18.54	11.73	6.71	4.69	3.18	1.71	0.92
1.75	37.83	29.90	18.35	11.59	6.62	4.68	3.17	1.68	0.90

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	498.80	386.33	213.31	141.20	85.14	56.92	38.18	21.78	11.68
1.70	484.80	365.60	209.27	138.17	81.70	55.40	37.60	21.29	11.28
1.75	462.50	352.30	205.03	136.25	78.20	54.20	36.70	21.14	11.09

Note:

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





CAUTION

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



THE LONG LIFE UPS BATTERY



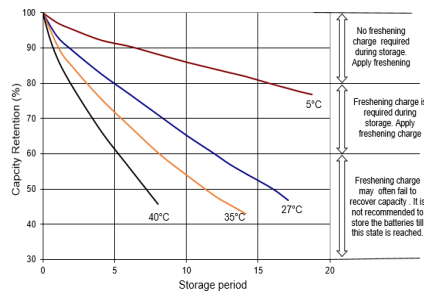
Features

- ✓ 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



Applications

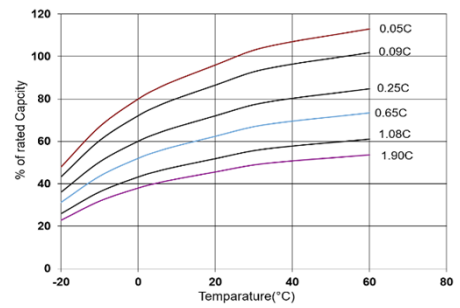
- ✓ Small UPS System
- ✓ Emergency Lighting
- ✓ Fire Alarm System
- ✓ Safety, Surveillance & Security Systems
- ✓ Medical Equipment

Quality Standards

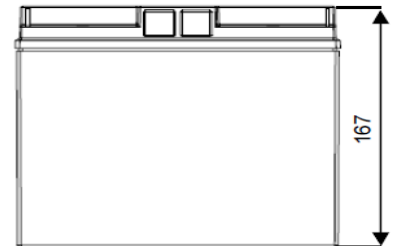
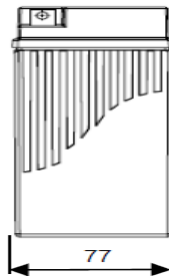
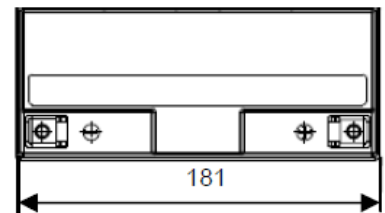
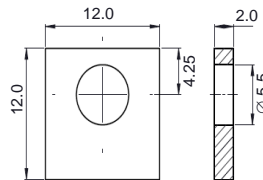
Manufactured in best-in-class facility certified to

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

Temperature Effect on Capacity



Battery Layout



AMARA RAJA BATTERIES LIMITED

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