

12AL150 12ALZ150

AMARON QUANTA™

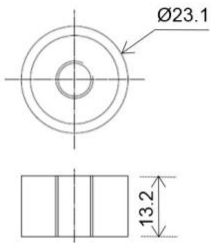
The industrial segment SMF-VRLA (Valve Regulated Lead Acid) Battery for UPS applications is built to perform

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™

TERMINAL LAYOUT

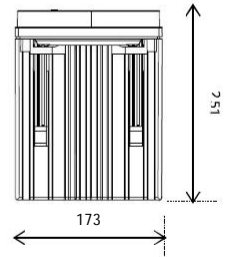
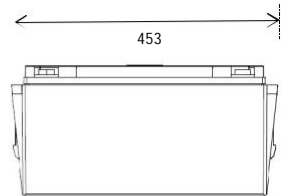
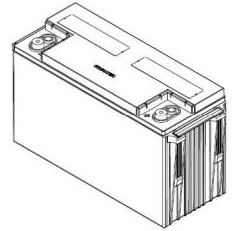


All dimensions are in mm



Specification

Nominal Voltage	12V
Rated Capacity	150 Ah / C ₂₀ / 1.75VPC / 27°C
Dimensions (±2mm)	Length 453mm (17.83 in.) Width 173mm (6.81 in.) Total Height 251mm (9.88 in.)
Approx. Weight	45.0 Kg (99.21 lbs)
Terminal	M8 x 25mm Copper terminal
Capacity @ 27°C	139.7 Ah (10hr, 13.97 A, 10.5 V/module) 128.6 Ah (5hr, 25.73 A, 10.2 V/module) 95.5 Ah (1hr, 95.54 A, 9.6 V/module)
Capacity affected (Temperature at C ₂₀ hr rate)	40°C (104°F) 110% 27°C (80.6°F) 100% 0°C (32°F) 80% -15°C (5°F) 60%
Case Material	Standard PPCP (12AL150) FR Version UL 94-V0 (12ALZ150)
Internal Resistance (As per IEC)	Approx. 4.86 mΩ for a fully charged battery (27°C)
Short Circuit Current (As per IEC)	2633 A
Operating Temp. range	-20°C to +50°C
Nominal Operating Temp. range	27°C ± 3°C
Standby use (27°C)	Charging Voltage 13.5 V/battery Charging Current Max. 25% of rated capacity Temp. Compensation ± 18mV/battery/°C
Cyclic use (27°C)	Charging Voltage 13.8 V/battery Charging Current Max. 25% of rated capacity Temp. Compensation ± 18mV/battery/°C
Self-Discharge	< 4% per month at 27°C



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

ECV/ Time	10 min	15 min	20 min	30 min	60 min	2 hrs	3 hrs	5 hrs	8 hrs	10 hrs	20 hrs
1.60	3594	2801	2269	1817	1125	680	495.0	340.0	225.0	183.0	93.0
1.65	3441	2764	2223	1786	1100	670	483.5	325.5	219.0	181.5	92.5
1.70	3288	2727	2177	1755	1075	659	470.0	318.0	213.0	180.0	92.0
1.75	3135	2690	2127	1724	1050	649	456.0	310.0	210.0	178.5	91.0
1.80	2982	2570	2078	1693	1024	638	442.0	302.0	207.0	177.0	90.0

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

ECV/ Time	10 min	15 min	20 min	30 min	60 min	2 hr	3 hr	5 hr	8 hr	10 hr	20 hr
1.60	326.09	258.62	211.26	153.06	95.54	59.08	40.38	27.79	17.24	14.59	8.03
1.65	316.11	250.28	204.31	150.79	94.65	56.69	39.16	26.76	16.87	14.41	7.83
1.70	306.12	241.94	197.36	148.51	93.75	54.29	37.94	25.73	16.49	14.23	7.63
1.75	300.00	238.10	194.80	147.06	91.46	53.57	37.88	25.64	16.39	13.97	7.50
1.80	294.12	230.77	189.80	144.23	89.29	53.19	37.69	25.42	16.30	13.89	7.46

* 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



Performance

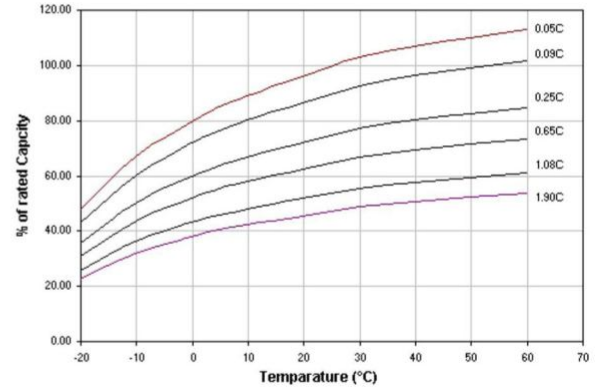
A clutch of design features ensures that AMARON QUANTA™ batteries perform predictably and reliably everytime

- ✓ Proven AGM technology that ensures maintenance free characteristics
- ✓ A unique heavy duty corrosion-resistant alloy for positive grids to increase cyclic life in tropical environments
- ✓ Radgrid™ profile provides lower internal resistance and superior high-discharge performance
- ✓ Instacharge™ a patented paste recipe for excellent charge acceptance
- ✓ Low self-discharge rates for extended storage periods
- ✓ Design Float life of upto 10 years
- ✓ Clean and Sleek looks

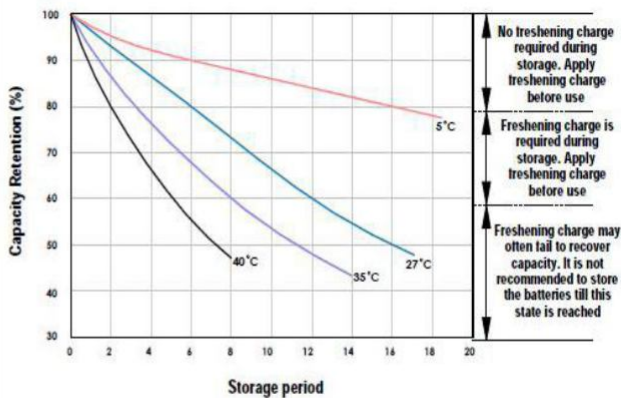
Discharge Characteristics



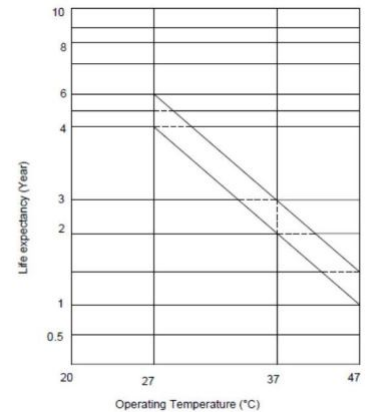
Temperature Effect on Capacity



Shelf Life Characteristics



Float Service Life vs. Temperature



AMARA RAJA BATTERIES LIMITED

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