





## Amaron Quanta S-Xel Tubular

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta tubular, a perfect choice for high cyclic back up requirements.

## **Design Features & Benefits**

- Hi-coerce<sup>TM</sup> spine cast High pressure spine casting(> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life .
- Bountiful Boss<sup>TM</sup> Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long

- Higher active material integrity, lowers resistance to delivers consistent power & life

- Panoptic Spine<sup>TM</sup> Mitigates corrosion prone zone, provides high life Really long
- Satiated wet paste<sup>TM</sup>
- Endura cast<sup>TM</sup> Automated cast-on-strap delivers durability & performance
- Unified Termi Seal<sup>TM</sup> Rigid & Integrated terminal connectivity provides sustainable strength

### **Major Applications**

- UPS Telecommunication S & T in Railways Process Instrumentation & Control
- Internet Housing Sites Office Automation Equipment's Power Plants & Substations
- Cable Television Equipment Fire alarm Inverters / Industrial inverters

## Amaron Quanta S-Xel Tubular batteries Range

SPECIFICATION TABLE									
Model	Nominal Voltage (V)	Capacity in Ah at C20hr at 27°C at 1.75ECV	Approx. Battery Weight ±5% in kgs with Acid	Overall Dimensions ±3 (in mm)				Charging current in (A)	
				Length	Width	Height*	Poly Material	Minimum	Maximum
12ALST080	12	80	30.5	410	176	281	PPCP	8.0	16.0
12ALST100	12	100	33.5	410	176	281	PPCP	10.0	20.0
12ALST120	12	120	49.9	521	230	281	PPCP	12.0	24.0
12ALTT150	12	150	49.5	500	189	343	PPCP	15.0	30.0
12ALTT180	12	180	58.5	500	190	400	PPCP	18.0	36.0
12ALTT200	12	200	63.0	500	190	400	PPCP	20.0	40.0

\*H : Height up to terminal top for up to 120Ah rating & up to top cover for all other ratings.

### Product Details

Type of +ve plate
Type of -ve plate
AH efficiency
WH efficiency
Terminal Type
Self-discharge for 28days
Recommended Max period of
storage
Electrolyte specific gravity of
the end charge at 27°C
Electrolyte specific gravity of
the end discharge

Tubular
Flat Pasted
> 90%
>80%
L-Terminal with Antimony Lead Alloy
≤5% (As per IS13369 ≤10%)
Max. 60days at 27°C
1.24
1.13

### Charging Parameters

Constant Voltage charging at 27°

• Dual Mode Charge

The charging facility should have auto float change over and charge mode facilities with the recommended voltage settings

- Float Voltage  $14.4 \pm 0.1 \text{V}$ /battery
- Boost Voltage 15.0 ± 0.1V /battery
  Over cutoff voltage 15.2V
- Over earbit voltage 15.2
- Under cutoff voltage 10.5V





20%0





c1

1000

**Discharge Characteristics** 



## State of charge (SOC) Vs Open Circuit Voltage (V)



# Shelf Life Characteristics at 27°C

0.1

120.0

110.0 100.0

90.0

80.0

70.0

60.0 50.0

40.0

30.0

20.0 10.0

0.0

0.01

State of Charge (SOC %)



Charging Time (Hr.)

## Glimpse of Advanced Manufacturing Technology :



Red Lead Mfg.

**Pressure Die Casting** 

Acid Circulated formation

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\*Design Improvements are continuous process at Amara Raja, as result the contents may change without prior notice