ATB-AGM-HR12-520

High-rate AGM.
Power for UPS bursts.

A 12 V 143 Ah high-rate AGM VRLA battery for short-duration, high-current UPS discharge. Sealed, maintenance-free and non-spillable, with M6 bolt terminals.



12 V	520 W	1430 A	42.5 kg
NOMINAL VOLTAGE	PER CELL · 15 MIN TO 1.67 V	MAX DISCHARGE (5 S)	APPROX. WEIGHT

Sealed AGM VRLA
Valve-regulated oxygen-recombination design. Maintenance-free and non-spillable: no electrolyte topping and no acid handling.

M6 bolt terminals
Threaded M6 terminals for secure bolted cable connections in UPS and standby systems.

High-rate discharge
Optimised for short, high-current discharge in UPS systems.

Standard footprint
341 × 173 × 287 mm case.

SPECIFICATIONS

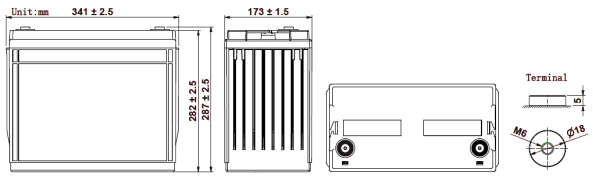
MECHANICAL

Length	**341 mm ±2.5**
Width	**173 mm ±1.5**
Container height	**282 mm ±2.5**
Overall height	**287 mm ±2.5**
Approx. weight	**42.5 kg ±3%**
Container material	**ABS, UL94-HB (UL94-V0 optional)**
Terminal type	**M6 bolt terminal**

ELECTRICAL

Nominal voltage	**12 V**
Chemistry	**AGM VRLA (sealed)**
Nominal capacity	**520 W/cell (15 min to 1.67 V/cell, 25°C) · 143 Ah (C20) · 90.1 Ah (C1)**
Float voltage @ 25°C	**13.5 – 13.8 V**
Equalizing voltage @ 25°C	**14.4 – 15.0 V**
Max charge current	**42.90 A**
Max discharge current	**1430.00 A (5 s)**
Internal resistance (charged)	**≈ 3.5 mΩ**
Operating temp. (dis / chg)	**−15°C~50°C / −15°C~40°C**
Storage temp.	**−15°C~40°C**

CONTAINER DRAWING — DIMENSIONS IN MM



ATB-AGM-HR12-520 — technical data

CONSTANT CURRENT DISCHARGE @ 25°C · UNIT: A

F.V (V/cell) / Time	5 min	8 min	10 min	15 min	20 min	30 min	60 min	90 min
1.60 V	423	371	343	287	234	173	100	71.7
1.67 V	384	340	317	268	220	163	95	68.8
1.70 V	368	327	306	260	214	159	93	67.4
1.75 V	339	305	287	246	203	153	90.1	65.3
1.80 V	311	282	268	233	194	146	86.9	63.2

CONSTANT POWER DISCHARGE @ 25°C · UNIT: W/CELL

F.V (V/cell) / Time	5 min	8 min	10 min	15 min	20 min	30 min	60 min	90 min
1.60 V	778	691	646	548	450	335	188	136
1.67 V	724	648	609	520	429	321	181	131
1.70 V	700	629	592	508	420	315	178	129
1.75 V	657	594	563	486	403	305	173	126
1.80 V	612	558	531	464	388	294	168	122

EFFECT OF TEMPERATURE ON CAPACITY (20 HR)

Temperature	Capacity (20 HR)
40 °C	102%
25 °C	100%
0 °C	85%
−15 °C	65%

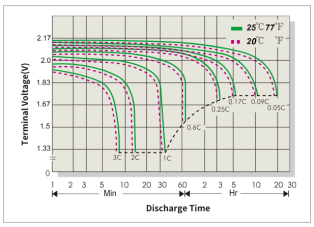
SELF-DISCHARGE CHARACTERISTICS

Storage time	Remaining capacity
3 months	91%
6 months	82%
12 months	64%

CHARACTERISTIC CURVES

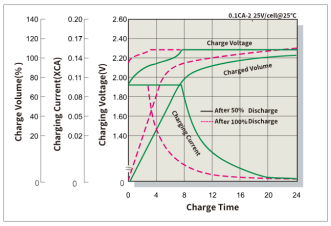
Discharge Characteristics

TERMINAL VOLTAGE (V/CELL) vs DISCHARGE TIME · 25°C / 20°C



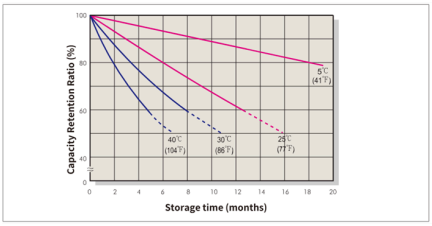
Charging Characteristics

0.1 CA · 2.25 V/CELL @ 25°C



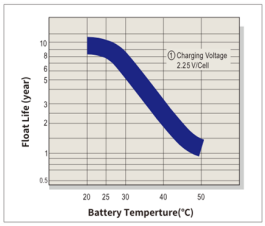
Capacity Retention (Self-Discharge)

CAPACITY RETENTION RATIO vs STORAGE TIME



Float Service Life

FLOAT LIFE vs BATTERY TEMPERATURE · 2.25 V/CELL



STANDARDS & QUALITY

AGM VRLA batteries produced by an ATB-approved manufacturing partner whose VRLA batteries are UL-recognized components under UL 1989, in facilities certified to ISO 9001, ISO 14001 and ISO 45001. Sealed, non-spillable VRLA construction.

Values are subject to variation of ±5% under normal manufacturing processes. Technical specifications are subject to change without prior notice. Curves represent typical performance for the AGM VRLA cell platform at the stated reference conditions. This product is engineered, specified and branded by ATB Power. E&OE. © ATB Power.