ATB-AGM-2V-100

# 2 V AGM cells.
# Long-life standby power.

A 2 V 109 Ah 2 V AGM VRLA cell for telecom, networking, UPS and utility standby applications. Sealed, maintenance-free and non-spillable, with M8 bolt terminals.




| 2 V | 109 Ah | 840 A | 5.6 kg |
|---|---|---|---|
| NOMINAL VOLTAGE | C20 CAPACITY @ 25°C | 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.

### M8 bolt terminals
Threaded M8 terminals for secure bolted cable connections in UPS, telecom and storage systems.

### Single-cell format
2 V cells build 12, 24, 48 V and higher strings for standby systems.

### Standard footprint
171 × 72 × 210 mm case.

## SPECIFICATIONS

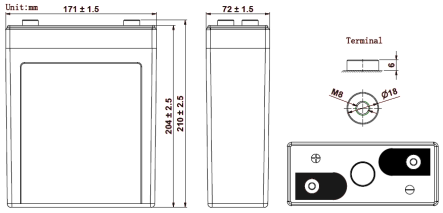
### MECHANICAL

| | |
|---|---|
| Length | **171 mm ±1.5** |
| Width | **72 mm ±1.5** |
| Container height | **204 mm ±2.5** |
| Overall height | **210 mm ±2.5** |
| Approx. weight | **5.6 kg ±3%** |
| Container material | **ABS, UL94-HB (UL94-V0 optional)** |
| Terminal type | **M8 bolt terminal** |

### ELECTRICAL

| | |
|---|---|
| Nominal voltage | **2 V** |
| Chemistry | **AGM VRLA (sealed)** |
| Capacity, 20 hr (C20) | **109 Ah** |
| Capacity, 10 hr (C10) | **101 Ah** |
| Capacity, 5 hr (C5) | **88.5 Ah** |
| Rating basis | **to 1.80 V/cell @ 25°C** |
| Float voltage @ 25°C | **2.25 – 2.30 V** |
| Equalizing voltage @ 25°C | **2.35 – 2.40 V** |
| Max charge current | **31.5 A** |
| Max discharge current | **840 A (5 s)** |
| Internal resistance (charged) | **≈ 1.2 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-2V-100 — technical data

## CONSTANT CURRENT DISCHARGE @ 25°C · UNIT: A

| F.V (V/cell) / Time | 30 min | 45 min | 1 h | 3 h | 5 h | 8 h | 10 h | 20 h |
|---|---|---|---|---|---|---|---|---|
| **1.60 V** | 104 | 75.2 | 63.1 | 27.5 | 19.0 | 12.6 | 10.5 | 5.69 |
| **1.67 V** | 103 | 74.1 | 62.2 | 27.3 | 18.7 | 12.4 | 10.4 | 5.61 |
| **1.70 V** | 101 | 73.1 | 61.3 | 27.0 | 18.3 | 12.2 | 10.3 | 5.55 |
| **1.75 V** | 99.2 | 71.7 | 60.1 | 26.5 | 18.0 | 12.0 | 10.2 | 5.50 |
| **1.80 V** | 97.2 | 69.2 | 57.3 | 26.1 | 17.7 | 12.0 | 10.1 | 5.44 |
| **1.85 V** | 89.3 | 65.2 | 55.2 | 24.0 | 16.9 | 11.4 | 9.45 | 5.24 |

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

| F.V (V/cell) / Time | 30 min | 45 min | 1 h | 3 h | 5 h | 8 h | 10 h | 20 h |
|---|---|---|---|---|---|---|---|---|
| **1.60 V** | 191 | 140 | 119 | 52.7 | 36.7 | 24.7 | 20.4 | 11.2 |
| **1.67 V** | 190 | 139 | 118 | 52.5 | 36.3 | 24.4 | 20.2 | 11.1 |
| **1.70 V** | 189 | 138 | 117 | 52.2 | 35.7 | 24.1 | 20.0 | 11.0 |
| **1.75 V** | 187 | 136 | 115 | 51.4 | 35.2 | 23.8 | 19.8 | 10.9 |
| **1.80 V** | 184 | 132 | 110 | 50.7 | 34.7 | 23.7 | 19.7 | 10.8 |
| **1.85 V** | 171 | 126 | 107 | 46.8 | 33.1 | 22.6 | 18.8 | 10.5 |

## EFFECT OF TEMPERATURE ON CAPACITY (10 HR)

| Temperature | Capacity (10 HR) |
|---|---|
| 40 °C | 102% |
| 25 °C | 100% |
| 0 °C | 85% |
| −15 °C | 65% |

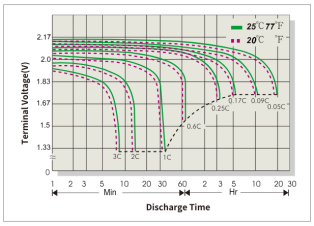
## SELF-DISCHARGE CHARACTERISTICS

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

## CHARACTERISTIC CURVES

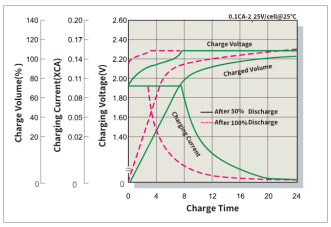
### Discharge Characteristics

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



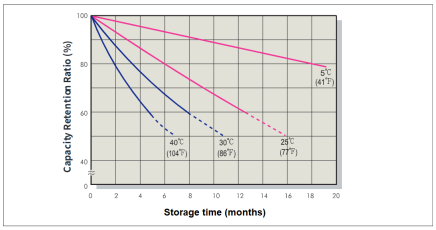

### Charging Characteristics

0.1 CA · 2.25 V/CELL @ 25°C



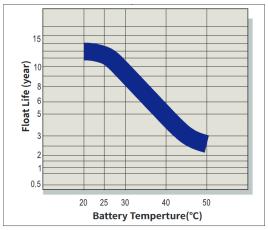

### Capacity Retention (Self-Discharge)

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.