ATB-AGM-GP12-80

# Sealed AGM power.
# Built for standby duty.

A 12 V 79 Ah general-purpose AGM VRLA battery for UPS, telecom, security and emergency lighting systems and energy storage. Valve-regulated oxygen-recombination construction with corrosion-resistant alloy grids, a high-strength AGM separator and high-purity active materials gives low self-discharge and long service life, in a sealed, maintenance-free, non-spillable package with M6 bolt terminals.




| 12 V | 79 Ah | 750 A | 21.7 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.

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

### Long service life
Corrosion-resistant alloy grids and a high-strength AGM separator with high-purity active materials give low self-discharge and long float life.

### Standard footprint
260 × 168 × 216 mm case for battery cabinets, racks and UPS enclosures.

## SPECIFICATIONS

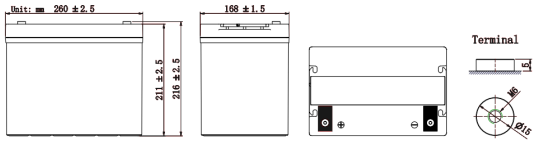
### MECHANICAL

| | |
|---|---|
| Length | **260 mm ±2.5** |
| Width | **168 mm ±1.5** |
| Container height | **211 mm ±2.5** |
| Overall height | **216 mm ±2.5** |
| Approx. weight | **21.7 kg ±3%** |
| Container material | **ABS, UL94-HB (UL94-V0 optional)** |
| Terminal type | **M6 bolt terminal** |

### ELECTRICAL

| | |
|---|---|
| Nominal voltage | **12 V** |
| Chemistry | **AGM VRLA (sealed)** |
| Capacity, 20 hr (C20) | **79 Ah** |
| Capacity, 10 hr (C10) | **75 Ah** |
| Capacity, 5 hr (C5) | **67 Ah** |
| Rating basis | **to 1.80 V/cell @ 25°C** |
| Float voltage @ 25°C | **13.5 – 13.8 V** |
| Equalizing voltage @ 25°C | **14.4 – 15.0 V** |
| Max charge current | **22.5 A** |
| Max discharge current | **750 A (5 s)** |
| Internal resistance (charged) | **≈ 7.0 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-GP12-80 — 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** | 79.0 | 57.0 | 47.9 | 21.5 | 14.3 | 9.53 | 7.84 | 4.12 |
| **1.67 V** | 77.7 | 56.2 | 47.2 | 21.3 | 14.2 | 9.41 | 7.75 | 4.06 |
| **1.70 V** | 76.6 | 55.4 | 46.5 | 21.1 | 13.9 | 9.29 | 7.65 | 4.02 |
| **1.75 V** | 75.1 | 54.3 | 45.5 | 20.7 | 13.6 | 9.14 | 7.58 | 3.98 |
| **1.80 V** | 73.6 | 52.4 | 43.4 | 20.3 | 13.4 | 9.10 | 7.50 | 3.94 |
| **1.85 V** | 67.6 | 49.5 | 41.9 | 18.7 | 12.8 | 8.65 | 7.16 | 3.80 |

## 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** | 145 | 106 | 90.0 | 41.2 | 27.8 | 18.7 | 15.5 | 8.14 |
| **1.67 V** | 144 | 105 | 89.3 | 41.0 | 27.5 | 18.5 | 15.3 | 8.06 |
| **1.70 V** | 143 | 104 | 88.5 | 40.8 | 27.0 | 18.3 | 15.1 | 7.96 |
| **1.75 V** | 141 | 103 | 87.3 | 40.2 | 26.7 | 18.0 | 15.0 | 7.90 |
| **1.80 V** | 140 | 100 | 83.5 | 39.5 | 26.3 | 18.0 | 14.9 | 7.83 |
| **1.85 V** | 129 | 95.0 | 81.0 | 36.5 | 25.1 | 17.2 | 14.2 | 7.57 |

## EFFECT OF TEMPERATURE ON CAPACITY (10 HR)

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

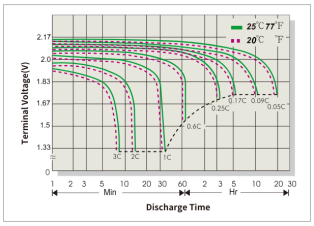
## SELF-DISCHARGE CHARACTERISTICS

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

## CHARACTERISTIC CURVES

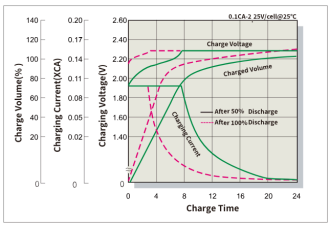
### Discharge Characteristics

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



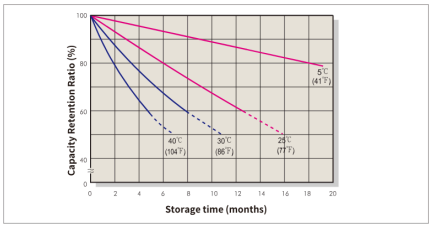

### Charging Characteristics

0.1 CA · 2.25 V/CELL @ 25°C



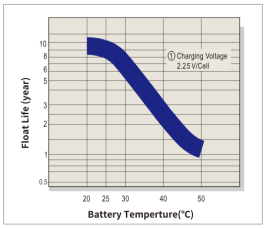

### Capacity Retention (Self-Discharge)

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.