

# MinuteBank

## VRLA AGM Battery

BT-HSE-120-12 [12V120Ah]



### General Features

- Designed floating charging service life: 12 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C-40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

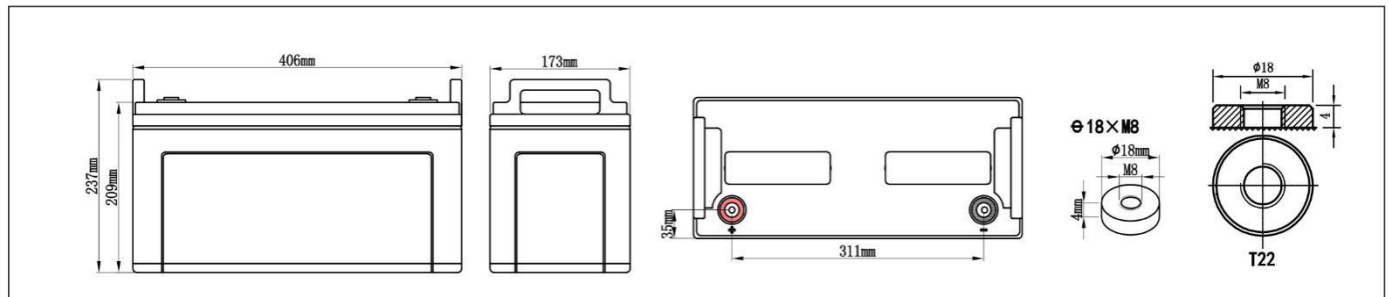
### Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipments
- Emergency lighting systems

### Physical Specifications

| Nominal Voltage | Nominal Capacity (20HR) | Dimension |         |         |         | Weight ±3%              | Internal Resistance (In full charge status) | Standard Terminals |
|-----------------|-------------------------|-----------|---------|---------|---------|-------------------------|---|--------------------|
|                 |                         | L         | W       | H       | TH      |                         |   |                    |
| 12V             | 120AH                   | 406±3mm   | 173±2mm | 209±3mm | 237±3mm | Approx 35.4kg (67.2lbs) | ≈4.53 mΩ                                    | T22 (standard)     |

### Dimensions



### Battery Discharge Table

| End Voltage (V)  | Minute (M) |      |      |      |      |      | Hour (H) |      |      |      |      |       |       |       |       |      |
|--|------------|------|------|------|------|------|----------|------|------|------|------|-------|-------|-------|-------|------|
|  | 5          | 10   | 15   | 20   | 30   | 45   | 1        | 1.5  | 2    | 3    | 4    | 5     | 6     | 8     | 10    | 20   |
| <b>Constant Current Discharge Data Sheet (Amperes at 25°C)</b> |            |      |      |      |      |      |          |      |      |      |      |       |       |       |       |      |
| 10.20  | 378        | 288  | 217  | 190  | 115  | 107  | 75.0     | 59.2 | 49.6 | 31.1 | 27.1 | 21.59 | 19.40 | 15.36 | 12.72 | 6.78 |
| 10.50  | 336        | 264  | 203  | 182  | 110  | 102  | 72.0     | 56.9 | 47.8 | 30.1 | 26.5 | 20.62 | 18.45 | 14.52 | 12.48 | 6.66 |
| 10.80  | 312        | 240  | 190  | 178  | 107  | 97.2 | 69.0     | 54.6 | 45.9 | 29.0 | 25.8 | 19.72 | 17.60 | 13.80 | 12.12 | 6.46 |
| <b>Constant Power Discharge Data Sheet (Watt at 25°C)</b>      |            |      |      |      |      |      |          |      |      |      |      |       |       |       |       |      |
| 10.20  | 3756       | 3180 | 2289 | 2040 | 1438 | 1080 | 938      | 684  | 515  | 384  | 314  | 248   | 227   | 184   | 156   | 81.7 |
| 10.50  | 3612       | 2700 | 2054 | 1992 | 1405 | 1056 | 924      | 674  | 498  | 372  | 305  | 240   | 221   | 181   | 151   | 79.2 |
| 10.80  | 3360       | 2520 | 1961 | 1962 | 1374 | 1020 | 882      | 643  | 481  | 359  | 294  | 232   | 215   | 179   | 144   | 77.4 |

**NOTE :** The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

## Constant-Voltage Charge

| Rated Capacity       |         |
|----------------------|---------|
| 20 hour rate (6.0A)  | 126.0AH |
| 10 hour rate (12.0A) | 120.5AH |
| 5 hour rate (20.4A)  | 102.0AH |
| 3 hour rate (30.0A)  | 90.0AH  |
| 1 hour rate (66.0A)  | 72.0AH  |

| Capacity affected by Temperature |      |
|----------------------------------|------|
| 40°C(104°F)                      | 103% |
| 25°C(77°F)                       | 100% |
| 0°C(32°F)                        | 86%  |

| Cycle Application  |
|--|
| 1. Limit initial current less than 30.0A.  |
| 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77 °F) |
| 3. Hold at 14.1V to 14.4V until current drop to under 0.72A for at least 3 hours.    |
| 4. Temperature compensation coefficient of charging voltage is -30mV/°C.             |

| Standby Service   |
|---|
| 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 30.0A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. |
| 2. Temperature compensation coefficient of charging voltage is -18mV/°C.  |

## Performance Characteristics

