



# ALPHA HOUSE

intelligent power

## AH12-7 (12V7.0AH)



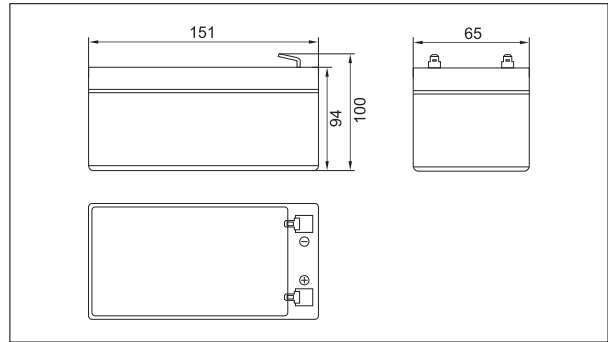
### Specifications

|                               |                   |                     |
|-------------------------------|-------------------|---------------------|
| Nominal Voltage               | 12V               |                     |
| Rated capacity (20 hour rate) | 7.0Ah             |                     |
| Dimensions                    | Total Height      | 100mm (3.94 inches) |
|                               | Height            | 94mm (3.70 inches)  |
|                               | Length            | 151mm (5.94 inches) |
|                               | Width             | 65mm (2.56 inches)  |
| Weight Approx                 | 2.1 Kg (4.51 lbs) |                     |

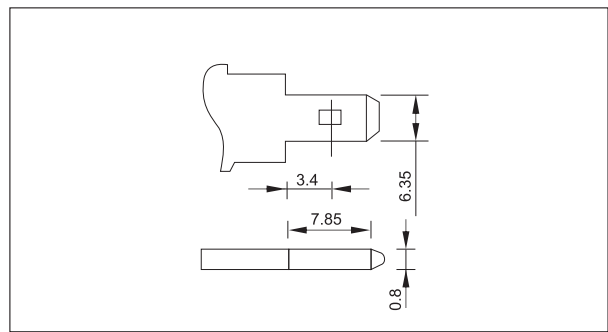
### Characteristics

|                                                |                                                       |                                                                  |
|------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------|
| Design Life                                    | EUROBAT Commercial Standard 3-5 years                 |                                                                  |
| Certification                                  | ISO9001, ISO14001, OHSAS18001, UL, CE, IEC60896-21/22 |                                                                  |
| Capacity<br>25°C(77°F)                         | 20 hour rate(0.35 A)                                  | 7.00 AH                                                          |
|                                                | 10 hour rate(0.64 A)                                  | 6.40 AH                                                          |
|                                                | 5 hour rate(1.20 A)                                   | 6.00AH                                                           |
|                                                | 1 hour rate(4.20 A)                                   | 4.20 AH                                                          |
|                                                | 1.5 hour discharge to 10.5V                           | 2.8 A                                                            |
| Internal Resistance                            | Full charged Battery at 25°C(77°F) 22 mΩ              |                                                                  |
| Capacity affected by Temperature (20hour rate) | 40°C(104°F)                                           | 102%                                                             |
|                                                | 25°C(77°F)                                            | 100%                                                             |
|                                                | 0°C(32°F)                                             | 85%                                                              |
|                                                | -15°C(5°F)                                            | 65%                                                              |
| Self-Discharge at 25°C(77°F)                   | Capacity after 3 month storage                        | 91%                                                              |
|                                                | Capacity after 6 month storage                        | 82%                                                              |
|                                                | Capacity after 12 month storage                       | 64%                                                              |
| Terminal                                       | T1, T2                                                |                                                                  |
| Charge (constant Voltage)                      | Cycle                                                 | Initial Charging Current less than 2.80A<br>Voltage 14.10-14.40V |
|                                                | Float                                                 | Voltage 13.50-13.80V                                             |

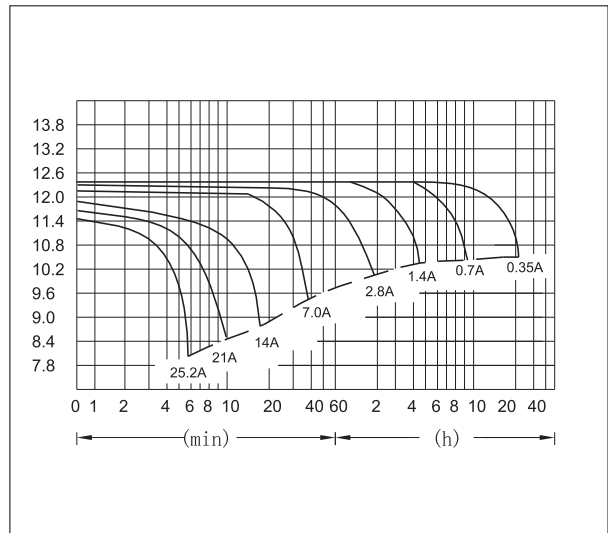
### Outer dimensions (mm)



### Terminal Type (mm)



### Discharge Curves 25°C(77°F)



Constant Current (Amp) and Constant Power (Watt) Discharge Table at 25°C(77°F)

| Time   |   | 5min   | 10min  | 15min  | 30min | 1h    | 2h    | 3h    | 4h    | 5h    | 8h   | 10h  | 20h  |
|--------|---|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|------|
| 9.60V  | A | 25.20  | 15.79  | 12.25  | 8.05  | 4.55  | 2.45  | 1.82  | 1.45  | 1.23  | 0.81 | 0.67 | 0.36 |
|        | W | 267.12 | 168.19 | 131.08 | 86.94 | 49.60 | 26.71 | 20.02 | 15.91 | 13.51 | 9.00 | 7.38 | 4.05 |
| 10.20V | A | 23.10  | 15.46  | 11.26  | 7.64  | 4.34  | 2.35  | 1.79  | 1.40  | 1.20  | 0.80 | 0.65 | 0.35 |
|        | W | 255.26 | 171.59 | 125.53 | 85.97 | 48.83 | 26.56 | 20.17 | 15.89 | 13.67 | 9.06 | 7.38 | 4.01 |
| 10.50V | A | 21.42  | 14.77  | 10.50  | 7.41  | 4.20  | 2.30  | 1.75  | 1.33  | 1.19  | 0.79 | 0.64 | 0.35 |
|        | W | 239.94 | 166.16 | 118.65 | 84.45 | 47.88 | 26.38 | 20.04 | 15.30 | 13.69 | 9.06 | 7.41 | 4.03 |
| 10.80V | A | 19.51  | 14.12  | 9.80   | 7.07  | 4.06  | 2.25  | 1.72  | 1.31  | 1.14  | 0.77 | 0.63 | 0.34 |
|        | W | 221.40 | 160.93 | 112.21 | 81.66 | 46.89 | 25.94 | 19.89 | 15.22 | 13.25 | 8.94 | 7.31 | 3.98 |
| 11.10V | A | 17.50  | 13.30  | 9.10   | 6.58  | 3.85  | 2.19  | 1.65  | 1.28  | 1.09  | 0.75 | 0.61 | 0.33 |
|        | W | 201.25 | 153.62 | 105.56 | 76.99 | 45.05 | 25.59 | 19.33 | 15.14 | 12.84 | 8.81 | 7.23 | 3.92 |