

## IONIZE 260 PRO

### Specification

|                                  |                                                                                                                                                                     |                                                          |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Nominal Voltage                  | 12V                                                                                                                                                                 |                                                          |
| Nominal Capacity(20HR)           | 220.0AH                                                                                                                                                             |                                                          |
| Dimension                        | Length                                                                                                                                                              | 522 ± 2mm (20.55 inches)                                 |
|                                  | Width                                                                                                                                                               | 240 ± 2mm (9.45 inches)                                  |
|                                  | Container Height                                                                                                                                                    | 218 ± 2mm (8.58 inches)                                  |
|                                  | Total Height (with Terminal)                                                                                                                                        | 224 ± 2mm (8.81 inches)                                  |
| Approx Weight                    | Approx 65.5kg (144.5lbs)                                                                                                                                            |                                                          |
| Terminal                         | T5XM8                                                                                                                                                               |                                                          |
| Container Material               | ABS                                                                                                                                                                 |                                                          |
| Rated Capacity                   | 260.0 AH/2.6A                                                                                                                                                       | (100hr, 1.80V/cell, 25 <sup>o</sup> C/77 <sup>o</sup> F) |
|                                  | 210.0 AH/21.0A                                                                                                                                                      | (10hr, 1.80V/cell, 25 <sup>o</sup> C/77 <sup>o</sup> F)  |
|                                  | 180.0 AH/36.0A                                                                                                                                                      | (5hr, 1.75V/cell, 25 <sup>o</sup> C/77 <sup>o</sup> F)   |
|                                  | 165.0 AH/55.0A                                                                                                                                                      | (3hr, 1.75V/cell, 25 <sup>o</sup> C/77 <sup>o</sup> F)   |
|                                  | 12.0 AH/128.0A                                                                                                                                                      | (1hr, 1.60V/cell, 25 <sup>o</sup> C/77 <sup>o</sup> F)   |
| Max. Discharge Current           | 1200A (5s)                                                                                                                                                          |                                                          |
| Internal Resistance              | Approx 5.0m Ω                                                                                                                                                       |                                                          |
| Operating Temp.Range             | Discharge : -20~55 <sup>o</sup> C (-4~131 <sup>o</sup> F)                                                                                                           |                                                          |
|                                  | Charge : 0~40 <sup>o</sup> C (32~104 <sup>o</sup> F )                                                                                                               |                                                          |
|                                  | Storage : -20~50 <sup>o</sup> C (-4~122 <sup>o</sup> F)                                                                                                             |                                                          |
| Nominal Operating Temp. Range    | 25 ± 3 <sup>o</sup> C (77 ± 5 <sup>o</sup> F)                                                                                                                       |                                                          |
| Cycle Use                        | Initial Charging Current less than 60A. Voltage                                                                                                                     |                                                          |
|                                  | 14.4V~14.6V at 25 <sup>o</sup> C(77 <sup>o</sup> F)Temp. Coefficient -30mV/°C                                                                                       |                                                          |
| Standby Use                      | No limit on Initial Charging Current Voltage                                                                                                                        |                                                          |
|                                  | 13.5V~13.8V at 25 <sup>o</sup> C(77 <sup>o</sup> F)Temp. Coefficient -20mV/°C                                                                                       |                                                          |
| Capacity affected by Temperature | 40 <sup>o</sup> C (104 <sup>o</sup> F)                                                                                                                              | 103%                                                     |
|                                  | 25 <sup>o</sup> C (77 <sup>o</sup> F)                                                                                                                               | 100%                                                     |
|                                  | 0 <sup>o</sup> C (32 <sup>o</sup> F)                                                                                                                                | 86%                                                      |
| Self Discharge                   | Battery may be stored for up to 10 months at 25 <sup>o</sup> C and then a freshening charge is required. For higher temperatures the time interval will be shorter. |                                                          |



### Typical Applications

- ♦ Railway and marine systems
- ♦ Electric tools
- ♦ Vehicle in place of walking
- ♦ Lawn mowers
- ♦ Golf trolleys and golf cart
- ♦ Electric toys
- ♦ Portable power Wheelchairs
- ♦ Medical equipments
- ♦ Solar / wind power system



ISO9001 ISO14001

### Constant Current Discharge (Amperes) at 25°C (77°F)

| F.V/Time   | 10min | 15min |       |       |       |       |      |      |      |      |      |      | 10h  | 20h  |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 278.4 | 240.0 | 204.6 | 154.8 | 115.1 | 94.3  | 60.1 | 46.2 | 37.6 | 31.3 | 27.2 | 22.1 | 19.9 | 11.3 |
| 1.80V/cell | 343.9 | 282.4 | 235.8 | 179.5 | 133.9 | 105.6 | 65.5 | 50.6 | 40.6 | 33.6 | 29.2 | 23.4 | 21.0 | 11.4 |
| 1.75V/cell | 377.8 | 302.0 | 250.2 | 189.2 | 139.0 | 110.5 | 68.0 | 52.0 | 41.7 | 34.5 | 30.0 | 23.8 | 21.2 | 11.5 |
| 1.70V/cell | 411.8 | 322.5 | 264.0 | 196.4 | 144.5 | 114.0 | 70.7 | 53.5 | 42.7 | 35.3 | 30.6 | 24.2 | 20.4 | 11.7 |
| 1.65V/cell | 444.4 | 342.9 | 281.4 | 204.6 | 148.1 | 117.8 | 72.7 | 55.8 | 44.2 | 36.3 | 31.3 | 24.7 | 21.8 | 11.8 |
| 1.60V/cell | 476.4 | 366.7 | 297.6 | 216.0 | 154.4 | 122.0 | 75.1 | 57.5 | 45.5 | 37.3 | 32.0 | 25.1 | 22.0 | 11.9 |

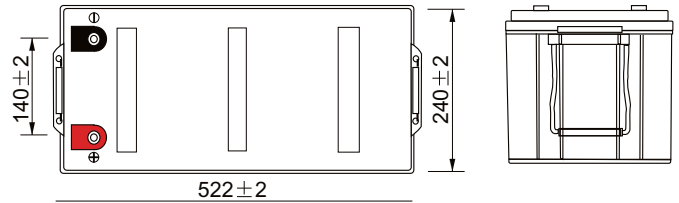
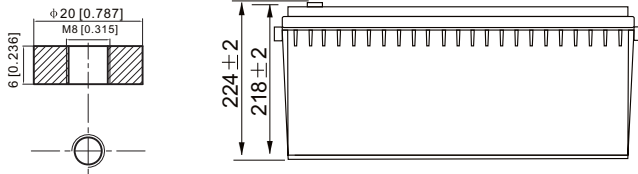
### Constant Power Discharge (Watts/cell) at 25°C (77°F)

| F.V/Time   | 10min | 15min | 20min | 30min | 45min | 1h    | 2h    | 3h    | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.85V/cell | 514.3 | 447.8 | 385.7 | 295.0 | 221.3 | 181.9 | 116.6 | 90.1  | 73.4 | 61.3 | 53.5 | 43.6 | 37.4 | 20.4 |
| 1.80V/cell | 627.7 | 519.9 | 438.0 | 336.9 | 255.4 | 202.6 | 126.4 | 98.1  | 78.9 | 65.5 | 57.2 | 46.1 | 39.5 | 21.6 |
| 1.75V/cell | 678.7 | 549.2 | 460.2 | 352.2 | 262.5 | 211.0 | 130.6 | 100.5 | 80.7 | 67.2 | 58.6 | 46.8 | 39.9 | 22.0 |
| 1.70V/cell | 723.0 | 578.2 | 482.0 | 363.5 | 272.0 | 217.0 | 135.6 | 103.1 | 82.6 | 68.6 | 59.7 | 47.4 | 40.2 | 22.1 |
| 1.65V/cell | 773.1 | 610.1 | 509.9 | 375.7 | 276.3 | 222.7 | 138.5 | 107.0 | 85.1 | 70.2 | 60.8 | 48.4 | 41.0 | 22.4 |
| 1.60V/cell | 809.8 | 641.7 | 533.4 | 393.8 | 286.4 | 229.4 | 142.5 | 109.8 | 87.3 | 72.0 | 61.9 | 49.0 | 41.4 | 22.5 |

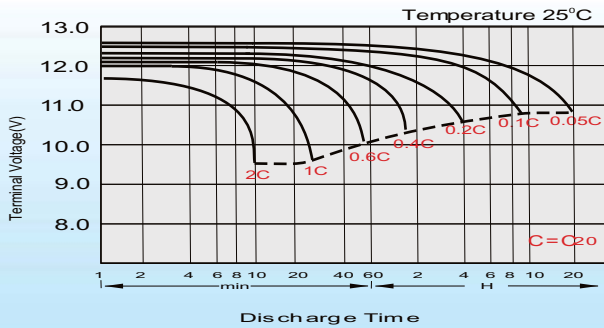
## IONIZE 260 PRO

### Dimensions

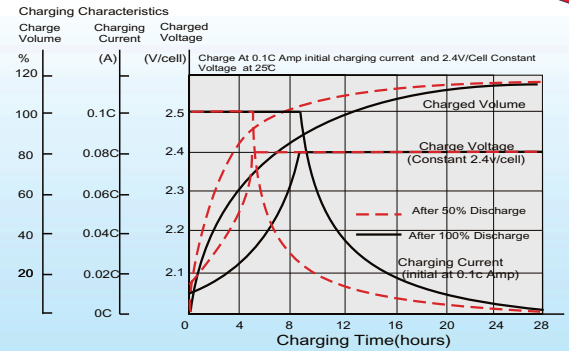
#### T5 Terminal Unit: mm [inches]



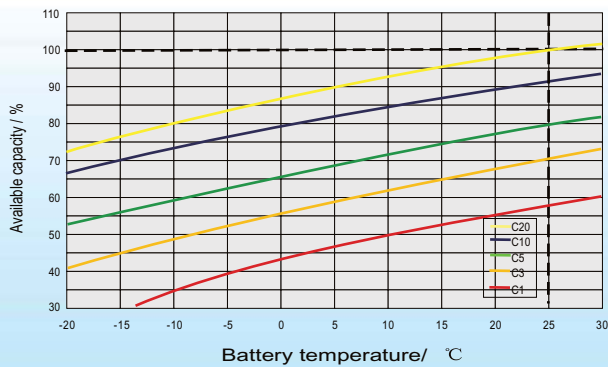
### Discharge Characteristics



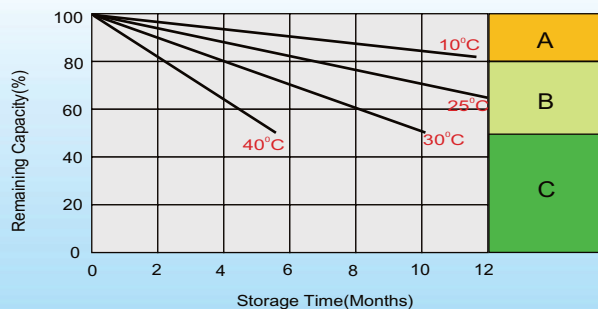
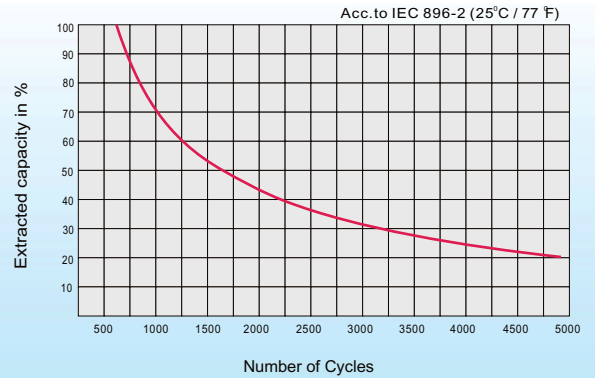
### Charging Characteristics (cycle use)



### Temperature Effects in Relation to Battery Capacity



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics

- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
  2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
  3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.