

# UPG Sealed Lead-Acid Battery

STAY POWERED®

Absorbant Glass Mat (AGM) technology for superior performance. Valve regulated, spill proof construction allows safe operation in any position. Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified. U.L. recognized under file number MH 20567.

UPG No. 45971

## UB8D

Maintenance-Free

### Specification

|                                                           |                                  |
|-----------------------------------------------------------|----------------------------------|
| <b>Nominal Voltage</b>                                    | 12 volts                         |
| <b>Nominal Capacity</b>                                   | 77° F (25° C)                    |
| 20-hr. (12.5A)                                            | 250 Ah                           |
| 10-hr. (23.3A)                                            | 233 Ah                           |
| 5-hr. (42.5A)                                             | 213 Ah                           |
| 1-hr. (150A)                                              | 150 Ah                           |
| <b>Approximate Weight</b>                                 | 154 lbs (70 kgs)                 |
| <b>Internal Resistance (approx.)</b>                      | 4 mOHMS                          |
| <b>Shelf Life</b> (% of normal capacity at 68° F (20° C)) |                                  |
| 3 Months                                                  | 6 Months                         |
| 91%                                                       | 83%                              |
|                                                           | 12 Months                        |
|                                                           | 64%                              |
| <b>Temperature Dependency of Capacity</b> (20 hour rate)  |                                  |
| 104° F (40° C)                                            | 77° F (25° C)                    |
| 102%                                                      | 100%                             |
|                                                           | 32° F (0° C)                     |
|                                                           | 5° F (-15° C)                    |
|                                                           | 85%                              |
|                                                           | 65%                              |
| <b>AGM Operational Temperature</b>                        |                                  |
| Charge                                                    | 32° F to 104° F (0° C to 40° C)  |
| Discharge                                                 | 5° F to 113° F (-15° C to 45° C) |
| <b>AGM Storage Temperature</b>                            | 5° F to 104° F (-15° C to 40° C) |



Due to continuous improvements to our products, product may vary slightly from depiction.

### Charge Method (Constant Voltage)

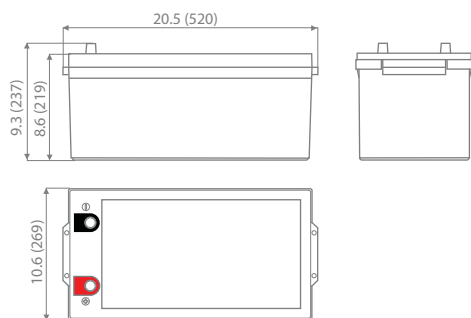
### Cycle Use (Repeating Use)

|                 |                 |
|-----------------|-----------------|
| Initial Current | 75 A or smaller |
| Control Voltage | 14.6 - 14.8 V   |

### Float Use

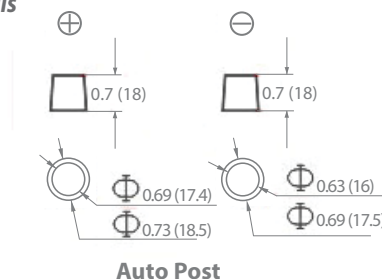
|                 |               |
|-----------------|---------------|
| Control Voltage | 13.6 - 13.8 V |
|-----------------|---------------|

### Physical Dimensions: in (mm)



**L:** 20.5 in (520 mm)  
**W:** 10.6 in (269 mm)  
**H:** 8.6 in (219 mm)  
**TH:** 9.3 in (237 mm)  
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

### Terminals

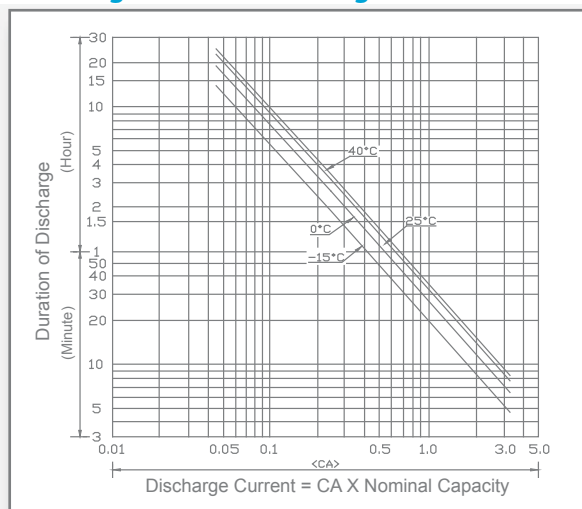
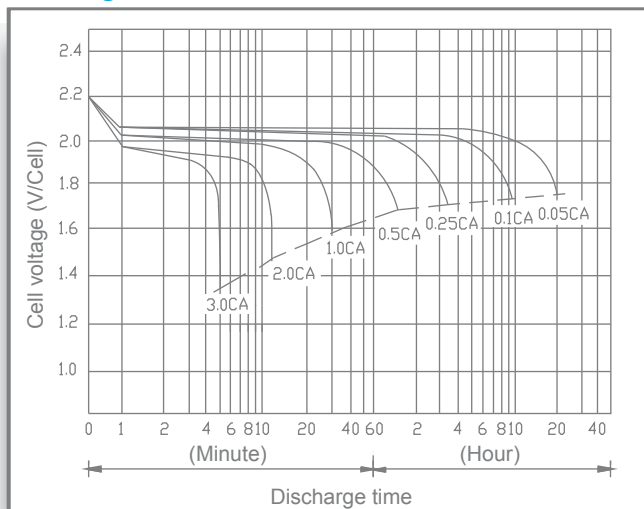
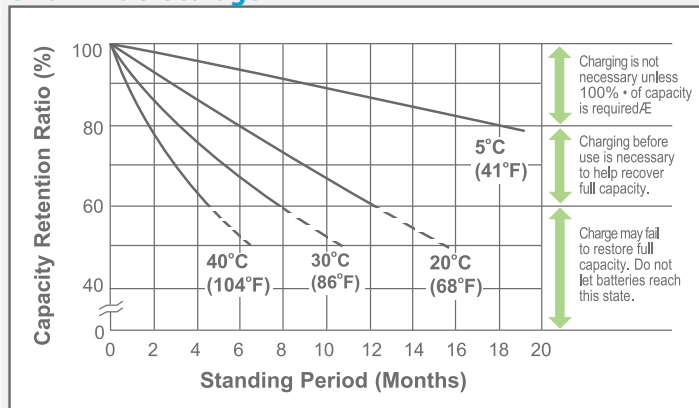
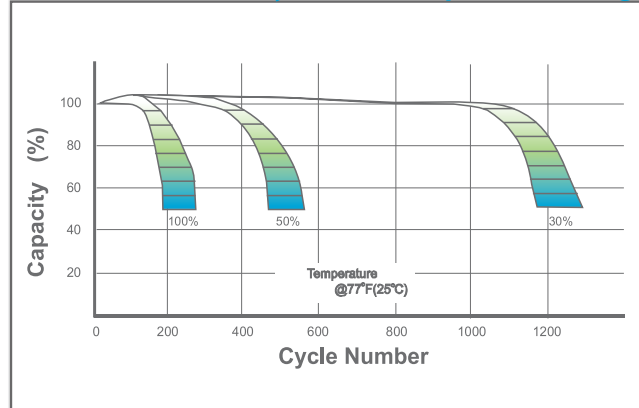
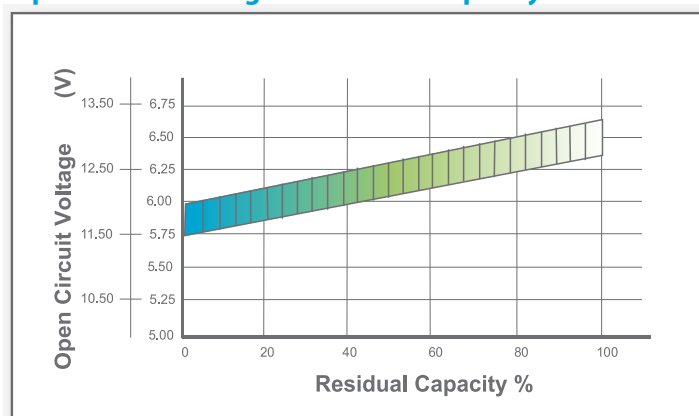
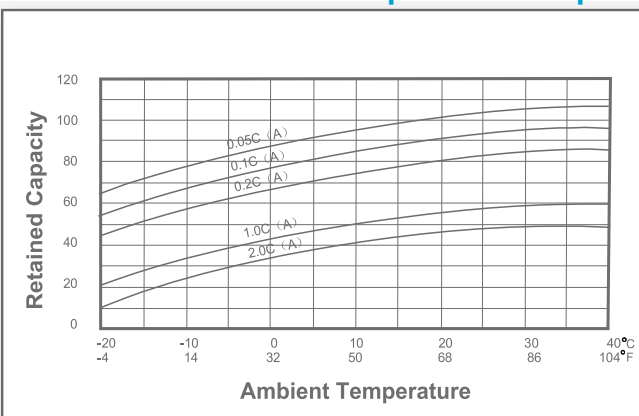


### Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

| F.V/Time | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|-----|-----|-----|-----|-----|-----|------|------|
| 9.60V    | 229   | 147 | 86  | 63  | 49  | 40  | 29  | 26   | 13.9 |
| 10.20V   | 214   | 138 | 82  | 61  | 48  | 40  | 28  | 25   | 13.5 |
| 10.50V   | 204   | 133 | 80  | 60  | 47  | 39  | 28  | 24   | 13.4 |
| 10.80V   | 196   | 130 | 78  | 58  | 46  | 38  | 27  | 24   | 13.2 |
| 11.10V   | 183   | 125 | 76  | 56  | 45  | 37  | 26  | 23   | 12.6 |

### Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

| F.V/Time | 30MIN | 1HR  | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|----------|-------|------|-----|-----|-----|-----|-----|------|------|
| 9.60V    | 2429  | 1700 | 992 | 728 | 566 | 467 | 329 | 297  | 161  |
| 10.20V   | 2333  | 1598 | 947 | 708 | 553 | 459 | 323 | 290  | 157  |
| 10.50V   | 2268  | 1547 | 924 | 691 | 544 | 454 | 320 | 286  | 155  |
| 10.80V   | 2270  | 1503 | 905 | 678 | 532 | 444 | 313 | 285  | 154  |
| 11.10V   | 2183  | 1485 | 903 | 669 | 530 | 443 | 312 | 276  | 149  |

**Discharge Time vs. Discharge Current****Discharge Characteristics****Shelf Life & Storage****Cycle Life vs Depth of Discharge****Open Circuit Voltage vs Residual Capacity****Effect of Temperature on Capacity****Charge Current & Final Discharge Voltage**

| Application | Charge Voltage(V/Cell) |           |                 | Max.Charge Current |
|-------------|------------------------|-----------|-----------------|--------------------|
|             | Temperature            | Set Point | Allowable Range |                    |
| Cycle Use   | 25°C(77°F)             | 2.45      | 2.40~2.50       | 0.30C              |
| Standby     | 25°C(77°F)             | 2.28      | 2.27~2.30       |                    |

| Final Discharge Voltage V/Cell | 1.75     | 1.70          | 1.60          | 1.30     |
|--------------------------------|----------|---------------|---------------|----------|
| Discharge Current(A)           | 0.2C>(A) | 0.2C<(A)<0.5C | 0.5C<(A)<1.0C | (A)>1.0C |