

The ASTERION DTM I series sealed lead-acid batteries are manufactured using AGM technology (electrolyte absorbed in a fiberglass separator), equipped with an LCD display that shows the battery operation status: voltage, capacity and number of days in use.

DTM I series relates to the "Long Life" product line with up to 12 years service life, with the possibility of increasing it by 15-30% with a single replenishment (topping up) of a specialized component solution.

They are recommended for use in uninterruptible power supplies, in electro-medical equipment, wheelchairs, boilers for heating systems, pumps, etc.



### Battery construction

| Element  | Positive plate | Negative plate | Case | Lid | Valve  | Terminal | Separator  | Electrolyte |
|----------|----------------|----------------|------|-----|--------|----------|------------|-------------|
| Material | Lead dioxide   | Lead           | ABS  |     | Rubber | Copper   | Fiberglass | Acid        |

### Specifications

|   |                            |
|---|----------------------------|
| Nominal voltage.....                    | 12 V                       |
| Cell.....                               | 6                          |
| Design life.....                        | 10-12 years                |
| Nominal capacity (25°C)                 |                            |
| 10 hours rate (15 A; 1,8 V/cell).....   | 150 Ah                     |
| 5 hours rate (25,7 A; 1,75 V/cell)..... | 128,5 Ah                   |
| 1 hours rate (96,7 A; 1,6 V/cell).....  | 96,7 Ah                    |
| Self-discharge.....                     | 3% capacity per month 25°C |
| Internal resistance (25°C).....         | 3,4 mΩ                     |

### Operating temperature range

|                                       |             |
|---------------------------------------|-------------|
| Discharge.....                        | -20÷60°C    |
| Charge.....                           | -10÷60°C    |
| Storage.....                          | -20÷60°C    |
| Maximum discharge current (25°C)..... | 970A (5sec) |
| Cycle mode (2,35÷2,4 V/cell)          |             |
| Max.charge current.....               | 45 A        |
| Temperature correction factor.....    | 30 mV/°C    |
| Standby mode (2,25÷2,3 V/cell)        |             |
| Temperature correction factor.....    | 20 mV/°C    |

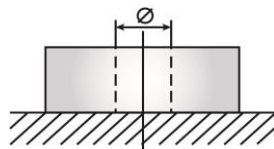
### Application

- Uninterruptable power supply
- Back up power supply
- Medical devices
- Control current cabinet
- Space-heating system
- Heating and water supply systems

#### Layout B



#### Terminal type Insert Ø8 mm

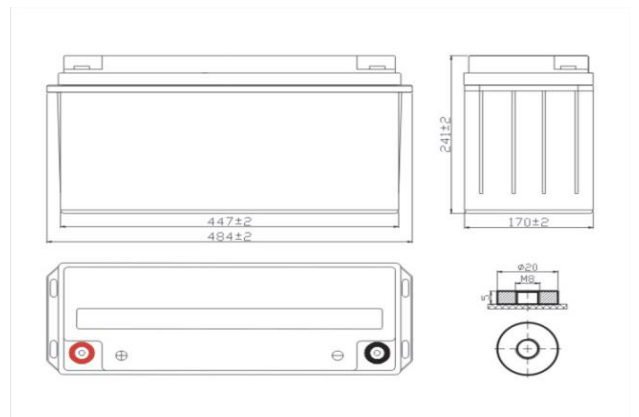


### Performance & characteristics

- LCD display showing battery status;
- Sound alarm in case of need to check the battery;
- Compliance with the UL requirements;
- Additional containers for topping up a specialized solution allow to increase battery life up to 15-30%;
- Patented IC Power Technology;
- High energy density;
- The battery case is made of flame-retardant ABS plastic.

### Dimensions (±2mm)

|                                |      |
|--------------------------------|------|
| Length, mm.....                | 484  |
| Width, mm.....                 | 170  |
| Height, mm.....                | 241  |
| Height over terminals, mm..... | 241  |
| Weight (±3%), kg.....          | 43,2 |

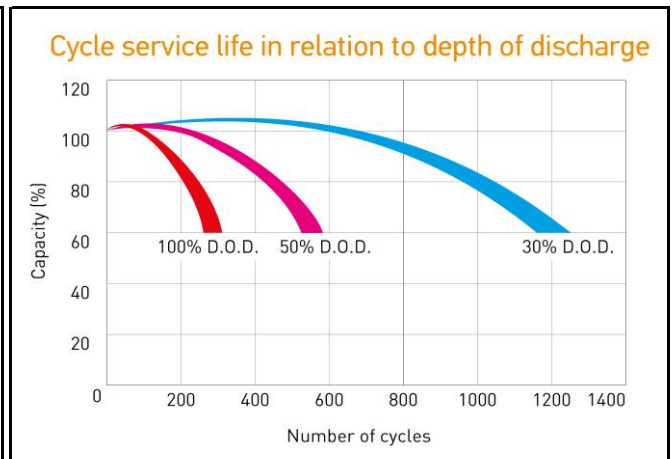
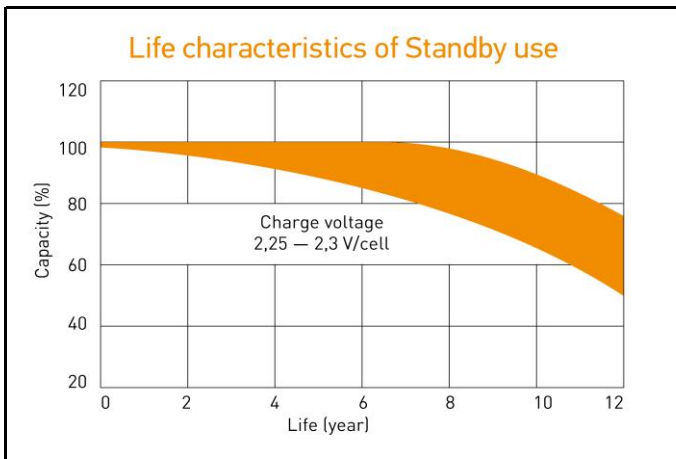
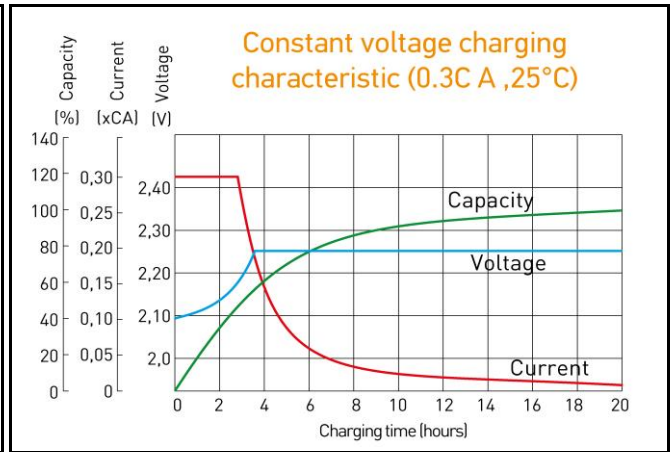
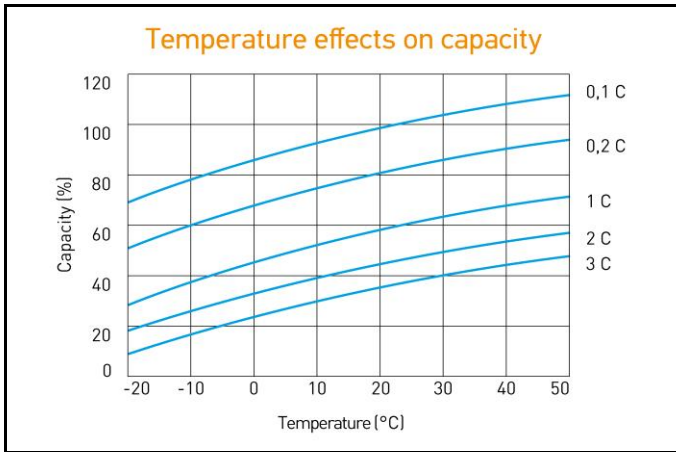


**Discharge Constant Current, A ( 25°C)**

| V/cell | 5 min | 10 min | 15 min | 30 min | 45 min | 1 h  | 3 h  | 5 h  | 10 h |
|--------|-------|--------|--------|--------|--------|------|------|------|------|
| 1,60   | 468   | 335    | 267    | 159    | 118    | 96,7 | 39,2 | 27,1 | 15,2 |
| 1,65   | 435   | 315    | 262    | 155    | 114    | 94,5 | 38,9 | 26,0 | 15,2 |
| 1,70   | 406   | 296    | 249    | 152    | 113    | 92,8 | 38,5 | 25,8 | 15,1 |
| 1,75   | 378   | 278    | 234    | 149    | 110    | 87,6 | 38,3 | 25,7 | 15,0 |
| 1,80   | 361   | 268    | 226    | 144    | 107    | 85,6 | 38,0 | 24,8 | 15,0 |

**Discharge Constant Power, W/cell ( 25°C)**

| V/cell | 5 min | 10 min | 15 min | 30 min | 45 min | 1 h | 3 h  | 5 h  | 10 h |
|--------|-------|--------|--------|--------|--------|-----|------|------|------|
| 1,60   | 811   | 595    | 496    | 311    | 228    | 183 | 77,7 | 52,6 | 29,7 |
| 1,65   | 769   | 574    | 478    | 306    | 222    | 179 | 75,7 | 51,6 | 29,7 |
| 1,70   | 734   | 550    | 463    | 302    | 215    | 175 | 73,8 | 50,1 | 29,5 |
| 1,75   | 696   | 527    | 444    | 292    | 209    | 171 | 72,1 | 49,2 | 29,3 |
| 1,80   | 674   | 505    | 428    | 282    | 203    | 167 | 70,2 | 47,9 | 29,3 |



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