

ASTERION HR are sealed maintenance-free lead-acid batteries with gas recombination system (VRLA). Are manufactured by AGM technology (electrolyte absorbed in glass fiber separators). Thanks to this technology the batteries do not require the distillate refilling throughout the entire service life. HR refers to a range of ASTERION UPS series, specifically designed for use in UPS Data Centers, communication systems and other equipment.



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 (4,5 A; 1,8 V/cell).....45 Ah
 5 hours rate (7,38 A; 1,75 V/cell).....36,9 Ah
 1 hours rate (27,6 A; 1,65 V/cell).....27,6 Ah
 Self-discharge.....3% capacity per month 25°C
 Internal resistance (25°C).....7,5 mΩ

Operating temperature range

Discharge.....-20÷60°C
 Charge.....-10÷60°C
 Storage.....-20÷60°C
 Maximum discharge current (25°C).....450A (5sec)
 Cycle mode (2,35÷2,4 V/cell)
 Max.charge current.....12 A
 Temperature correction factor.....30 mV/°C
 Standby mode (2,25÷2,3 V/cell)
 Temperature correction factor.....20 mV/°C

Application

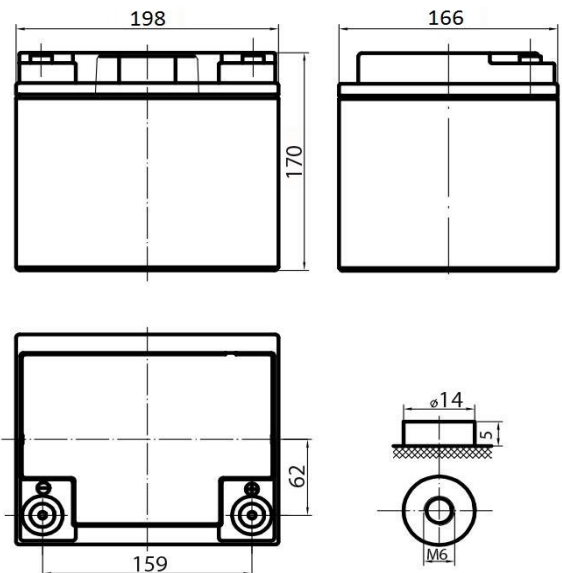
- Uninterruptable power supply
- Back up power supply
- Medical devices
- Renewable energy systems
- Portable devices
- Professional equipment

Performance & characteristics

- AGM technology allows to recombine 99% of the generated gas;
- No restrictions on air transportation;
- Compliance with the UL requirements;
- Lead plates, alloyed by calcium, provide high energy density;
- Maintenance-free. Do not require distillate topping;
- Long service life;
- The battery case is made of flame-retardant ABS plastic.

Dimensions (±2mm)

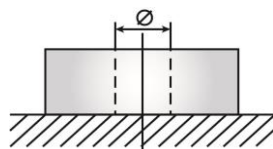
Length, mm.....198
 Width, mm.....166
 Height, mm.....170
 Height over terminals, mm.....170
 Weight (±3%), kg.....14,8



Layout
E



Terminal type
Insert Ø6 mm

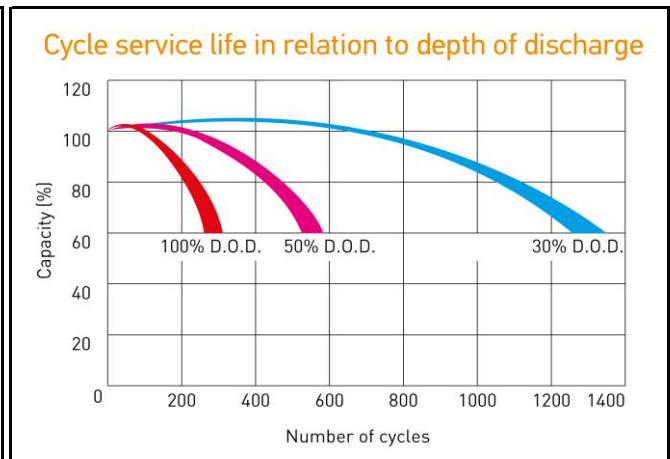
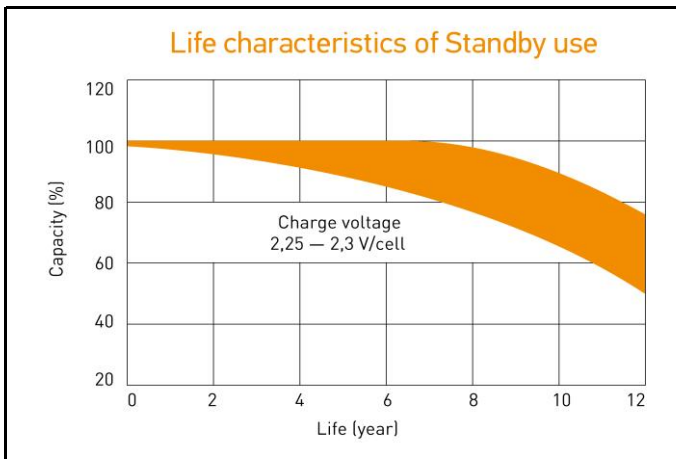
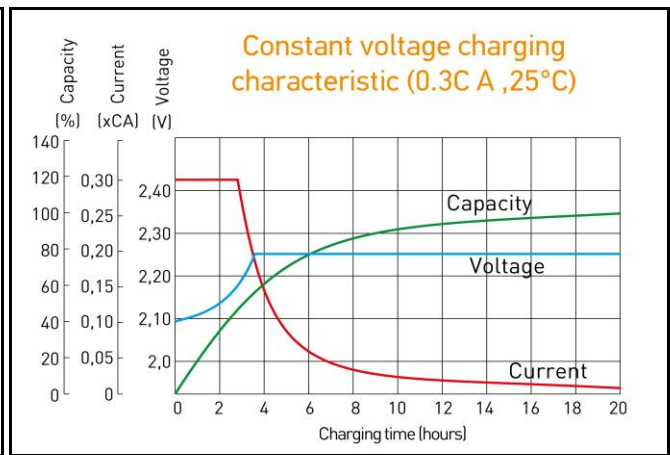
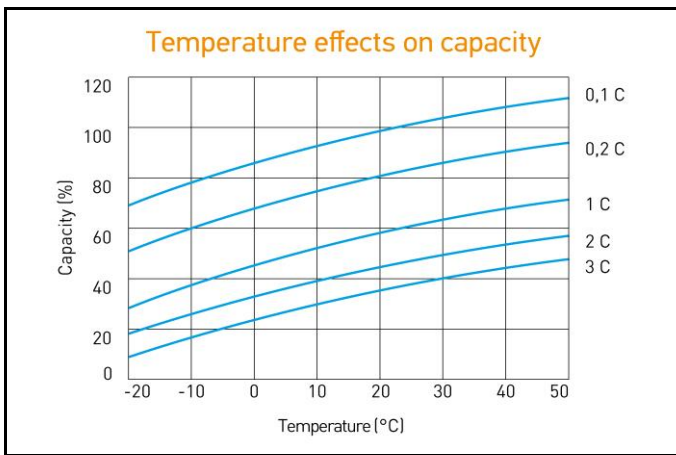


Discharge Constant Current, A (25°C)

| V/cell | 5 min | 10 min | 15 min | 30 min | 1 h | 3 h | 5 h | 10 h | 20 h |
|--------|-------|--------|--------|--------|------|------|------|------|------|
| 1,60 | 149 | 100 | 77,8 | 45,7 | 28,0 | 11,8 | 7,80 | 4,58 | 2,37 |
| 1,65 | 136 | 95,0 | 74,3 | 45,5 | 27,6 | 11,6 | 7,66 | 4,54 | 2,34 |
| 1,70 | 134 | 90,0 | 73,0 | 43,9 | 27,2 | 11,3 | 7,52 | 4,53 | 2,34 |
| 1,75 | 118 | 85,0 | 69,0 | 39,9 | 26,9 | 11,1 | 7,38 | 4,51 | 2,33 |
| 1,80 | 114 | 80,0 | 66,0 | 39,0 | 26,5 | 10,9 | 7,30 | 4,50 | 2,33 |

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

| V/cell | 5 min | 10 min | 15 min | 30 min | 1 h | 3 h | 5 h | 10 h | 20 h |
|--------|-------|--------|--------|--------|------|------|------|------|------|
| 1,60 | 263 | 187 | 147 | 98,6 | 59,2 | 24,5 | 15,8 | 9,02 | 4,77 |
| 1,65 | 246 | 174 | 140 | 86,9 | 54,8 | 22,8 | 14,8 | 8,81 | 4,65 |
| 1,70 | 232 | 166 | 135 | 83,8 | 54,0 | 22,5 | 14,7 | 8,63 | 4,55 |
| 1,75 | 212 | 156 | 127 | 81,8 | 53,1 | 22,3 | 14,5 | 8,44 | 4,44 |
| 1,80 | 203 | 153 | 126 | 80,0 | 52,3 | 22,0 | 14,2 | 8,24 | 4,34 |



ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE