

ASTERION HR-W series batteries are sealed, maintenance-free lead-acid batteries with gas recombination system (VRLA), manufactured using AGM technology (electrolyte absorbed in a separator).

The HR-W series relates to the ASTERION UPS series, designed specifically for use in uninterruptible power supplies for server and other similar systems. The HR-W series has high energy efficiency due to its use in the production of more massive plates.



**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.....8 years  
 Nominal capacity (25°C)  
     15 min discharge constant power up to 1,7V/cell.....34,1 W  
     20 hours rate (0,45 A; 1,75 V/cell).....9 Ah  
     10 hours rate (0,86 A; 1,75 V/cell).....8,6 Ah  
 Self-discharge.....3% capacity per month 20°C  
 Internal resistance (25°C).....20 mΩ

**Operating temperature range**

Discharge.....-20+60°C  
 Charge.....-10+60°C  
 Storage.....-20+60°C  
 Maximum discharge current (25°C).....160A (5sec)  
 Cycle mode (2,35±2,4 V/cell)  
     Max.charge current.....2,7 A  
     Temperature correction factor.....30 mV/°C  
 Standby mode (2,25±2,3 V/cell)  
     Temperature correction factor.....20 mV/°C

**Application**

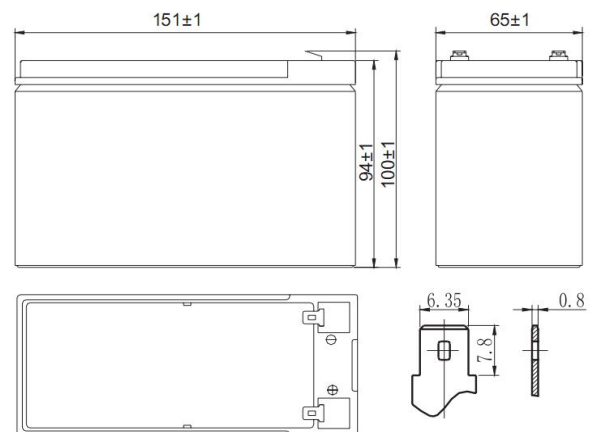
- Uninterruptable power supply
- Back up power supply
- Medical devices
- Portable devices
- Professional equipment

**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.....151  
 Width, mm.....65  
 Height, mm.....94  
 Height over terminals, mm.....100  
 Weight (±3%), kg.....2,62



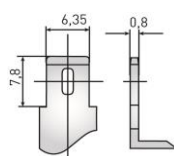
**Layout**

D



**Terminal type**

F2

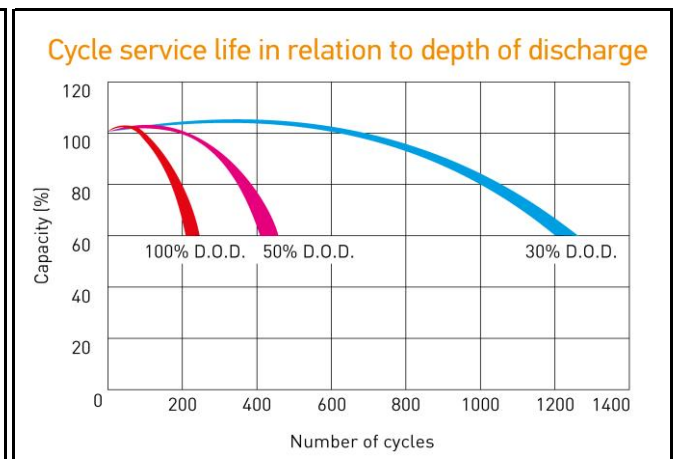
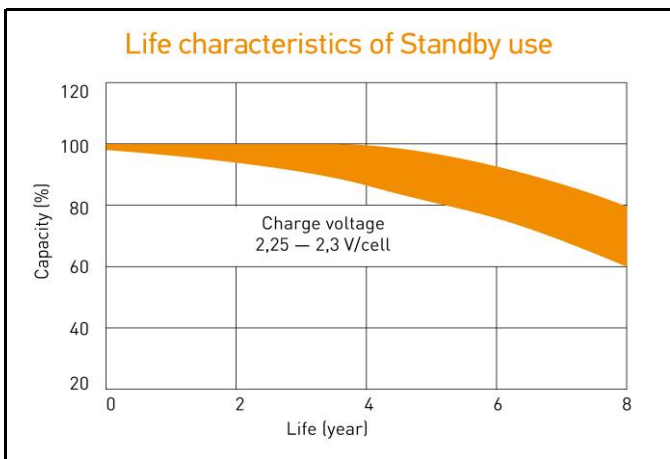
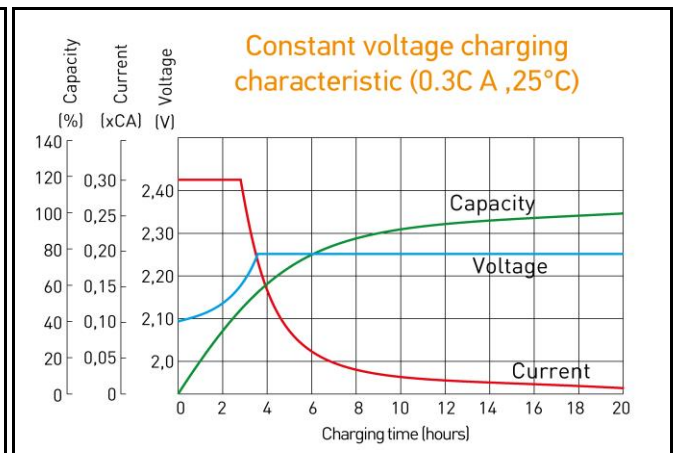
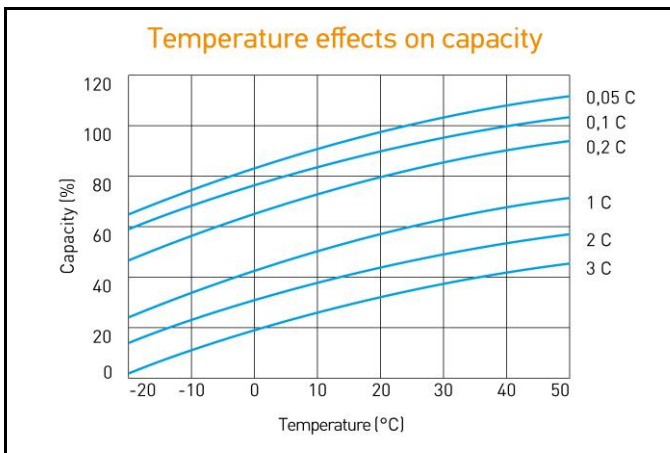


**Discharge Constant Current, A ( 25°C)**

V/cell	5 min	10 min	15 min	30 min	45 min	1 h	3 h	5 h	20 h
1,60	42,0	27,8	20,2	11,0	7,98	6,18	2,60	1,74	0,52
1,65	39,5	26,2	19,2	10,5	7,59	5,89	2,59	1,68	0,51
1,70	37,0	24,7	18,1	9,90	7,21	5,61	2,56	1,64	0,48
1,75	34,4	23,2	17,0	9,33	6,82	5,32	2,53	1,55	0,45
1,80	33,0	22,4	16,5	9,08	6,66	5,21	2,50	1,49	0,42

**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	20 h
1,60	74,5	49,7	36,1	20,7	14,8	11,6	5,64	3,43	0,99
1,65	71,3	47,8	35,1	19,9	14,4	11,2	5,51	3,37	0,96
1,70	68,1	46,0	34,1	19,3	14,0	10,9	5,35	3,27	0,93
1,75	65,0	44,1	32,1	18,6	13,5	10,6	5,17	3,15	0,88
1,80	61,8	42,2	31,0	17,9	13,0	10,3	4,97	3,02	0,82



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