

ASTERION DTX Series Lead Acid Batteries are designed for use in renewable energy-based power systems, including solar and wind energy, autonomous energy supply systems. The batteries are sealed and maintenance-free, with a service life of 10 years in a buffer mode. Manufactured by using GEL technology: during the production process (a gel solution of sulfuric acid gelled in a gel) is used as an electrolyte, which ensures high battery resistance to deep discharges (optimal when operating in a cyclic mode) and stable operation under conditions of ambient temperature changes.



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 years
 Nominal capacity (25°C)
 20 hours rate (5 A; 1,75 V/cell).....100 Ah
 10 hours rate (9,71 A; 1,75 V/cell).....97,1 Ah
 5 hours rate (18,1 A; 1,70 V/cell).....90,5 Ah
 Self-discharge.....3% capacity per month 20°C
 Internal resistance (25°C).....5 mΩ

Operating temperature range

Discharge..... -10÷40°C
 Charge..... -20÷60°C
 Storage..... -20÷60°C
 Maximum discharge current (25°C).....900A (5sec)
 Cycle mode (2,35÷2,4 V/cell)
 Max.charge current.....20 A
 Temperature correction factor.....30 mV/°C
 Standby mode (2,25÷2,3 V/cell)
 Temperature correction factor.....20 mV/°C

Application

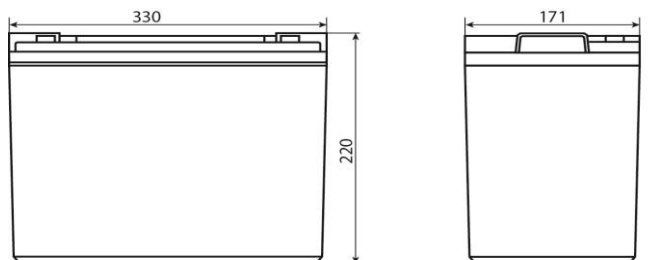
- Uninterruptable power supply
- Back up power supply
- Communication system
- Renewable energy system
- Communication Power Racks

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

Dimensions (±2mm)

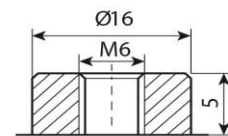
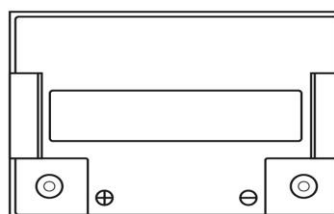
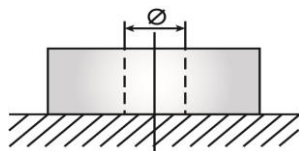
Length, mm.....330
 Width, mm.....171
 Height, mm.....215
 Height over terminals, mm.....220
 Weight (±3%), kg.....30



Layout B



Terminal type Insert Ø6

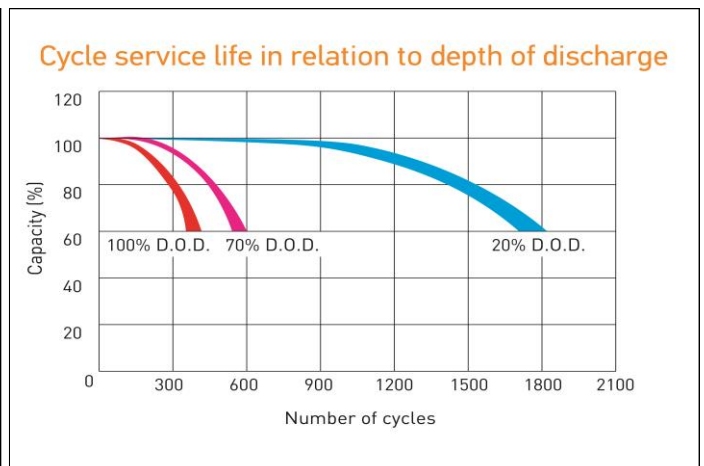
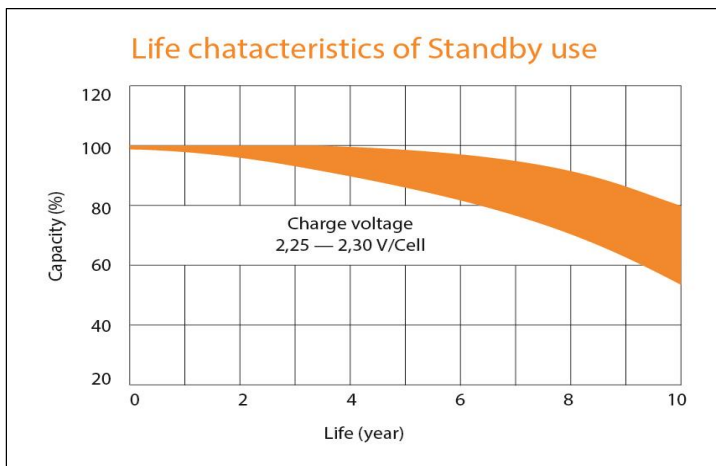
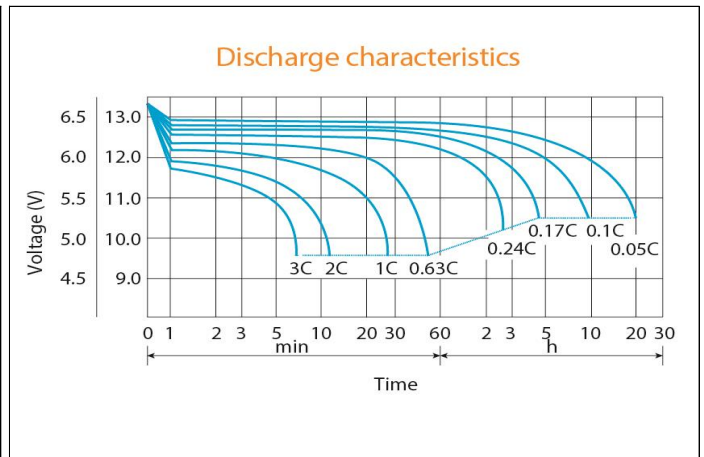
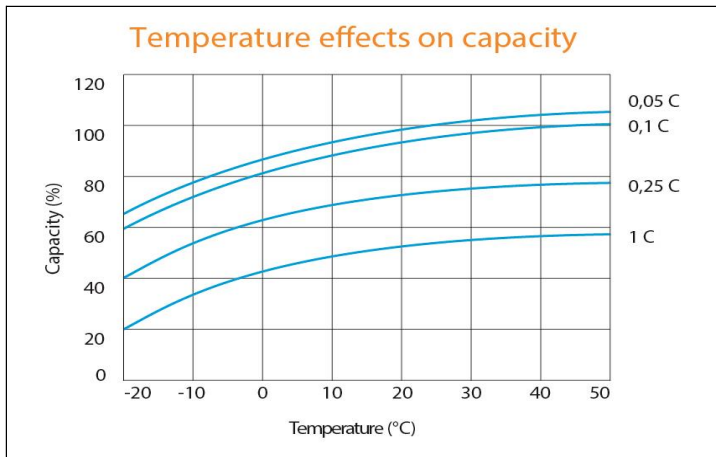


Discharge Constant Current, A (25°C)

V/cell	5 min	10 min	15 min	30 min	1 h	3 h	5 h	10 h	20 h
1,60	291	206	164	103	59,0	25,4	16,8	9,60	5,24
1,65	282	196	162	101	58,7	25,3	16,7	9,52	5,15
1,70	274	189	159	99,9	58,2	25,2	16,6	9,41	5,08
1,75	246	174	151	97,2	57,6	25,1	16,4	9,33	5,00
1,80	222	159	140	92,6	56,3	24,3	16,2	9,23	4,85

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	503	356	294	181	106	50,3	33,3	19,0	9,94
1,65	493	344	289	179	106	50,1	33,2	18,9	9,88
1,70	488	335	286	178	105	49,9	33,1	18,7	9,72
1,75	444	312	273	173	104	49,7	32,7	18,5	9,51
1,80	404	288	251	167	102	48,3	32,1	18,3	9,27



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