

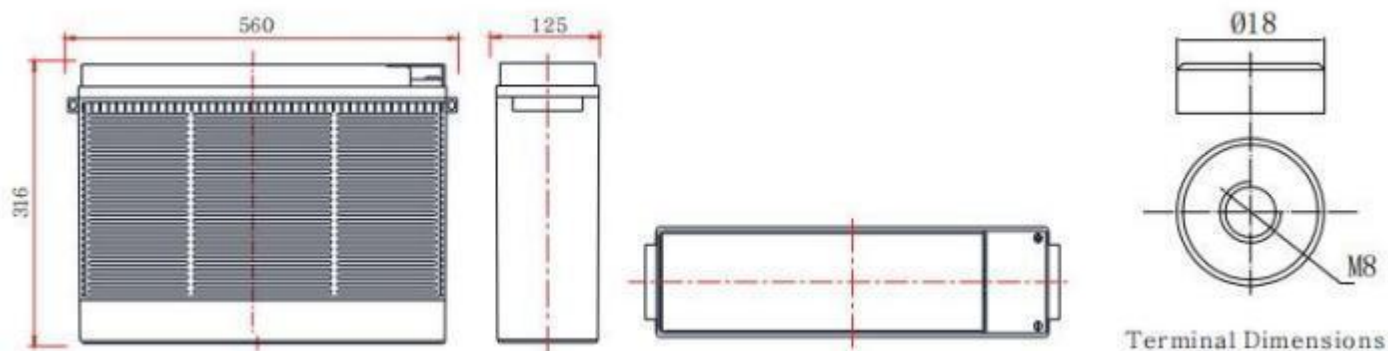
General Features

- ▶ Narrow structure and front terminal design, suitable for 19-inch and 23-inch standard cabinets
- ▶ High corrosion resistant performance: Pb-Ca multi-alloy grid
- ▶ Excellent charge acceptance ability
- ▶ Excellent deep cycle discharge capability
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology
- ▶ Long life



Dimension: 560(L) × 125(W) × 316(H) × 316(TH) / (±2mm)

Unit: mm



Specification	
Nominal Voltage	12V
Nominal Capacity	190Ah@10hour-rate to 1.80V per cell @25°C
Design life	12 years
Terminal	M8
Approx. Weight	Approx. 53.5 ±3%kg (117.95±3%lbs)
Container Material	ABS(UL94-HB, UL94-V0 Optional)
short-circuit current	2400A
Internal resistance(Full charged at 25°C:)	5.0 mΩ
Self discharge	3% of capacity declined per month at 25°C
Operating Temperature	
Discharge:	-20 ~50°C(4~ 122°F)
Charge :	-20 ~50°C(4~ 122°F)
Storage:	-20 ~50°C(4~ 122°F)
Charge Method(25 °C)	
Charge current:	Max. 47.5A;Recom.19.0A
Float charge:13.5-13.8V	recom.13.8V(-18mV/ °C)
Equalize charge:13.8-14.1V	recom.14.1V(-24mV/ °C)
Cycle charge:14.4-15.0V	recom.14.7V(-30mV/ °C)

Standards

Executive standard: IEC 60896-21/22, GB/T 19638.1-2014

Applications

- ▶ UPS/EPS
- ▶ Power systems
- ▶ Telecom outdoor integration site
- ▶ Emergency lighting, Auto control system
- ▶ Solar/wind generating storage cyclic
- ▶ Other general purpose

Rated Capacity

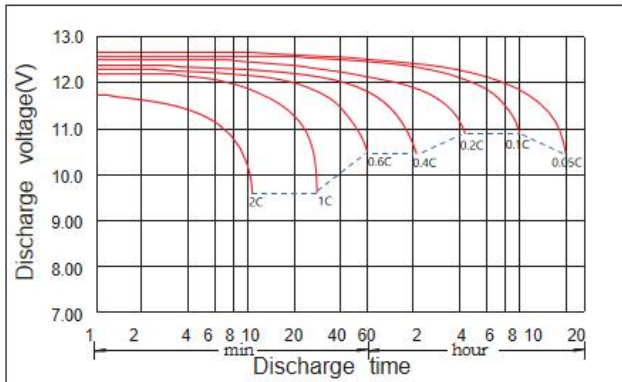
10Hour Rate (19.0A to 10.8V)	190.0Ah
3Hour Rate (50.5A to 10.2V)	151.5Ah
1Hour Rate (120.2A to 9.6V)	120.2Ah

Attain Certificate

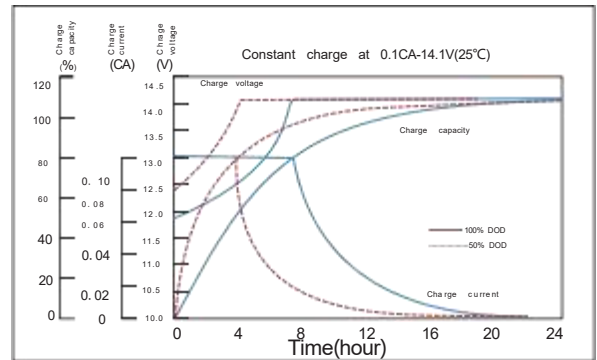


Front Terminal Battery FA12-180

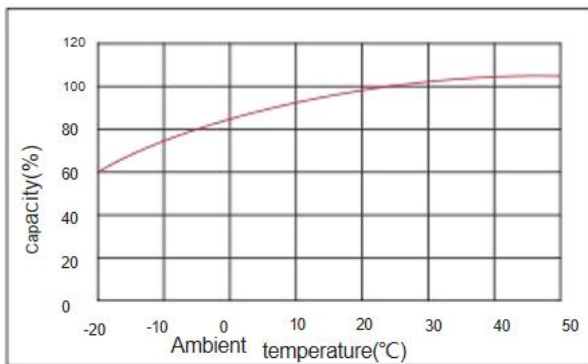
Discharging characteristic



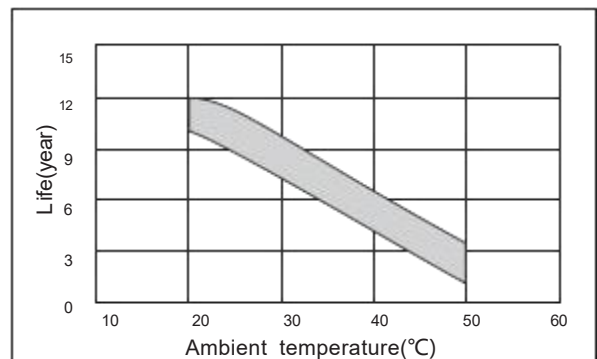
Charging characteristic



The effect of temperature on capacity



The effect of temperature on float life



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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	324.7	198.8	150.8	120.2	89.3	71.2	53.6	43.2	36.7	31.2	24.1	20.0	10.5
1.65V	312.0	190.9	144.8	115.5	86.6	69.6	51.9	41.8	35.8	30.8	23.8	19.8	10.3
1.70V	292.2	182.4	138.4	110.6	83.2	66.7	50.5	40.9	34.9	30.1	23.5	19.5	10.2
1.75V	271.9	172.6	132.2	107.2	79.8	64.4	49.0	39.8	34.0	29.4	23.1	19.2	10.2
1.80V	256.1	167.9	127.5	102.5	76.0	62.4	48.5	38.7	33.1	28.5	22.7	19.0	10.1
1.85V	212.5	142.1	111.3	90.1	68.7	55.2	42.6	35.1	30.1	26.0	21.3	17.5	9.65

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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	570.4	361.1	274.4	220.1	165.2	131.1	101.1	80.9	69.1	60.0	47.0	39.4	20.6
1.65V	553.4	350.3	265.6	213.8	161.1	128.9	99.6	79.0	67.6	59.4	46.6	39.0	20.3
1.70V	526.1	338.2	262.4	208.2	158.8	124.7	95.4	77.1	66.0	58.2	46.0	38.4	20.1
1.75V	496.7	326.5	251.6	203.7	154.4	121.4	94.8	75.4	64.6	56.9	45.5	38.0	20.1
1.80V	469.8	315.3	242.1	195.3	146.4	119.4	92.3	74.6	63.1	55.9	44.8	37.5	19.9
1.85V	391.4	274.2	215.1	174.5	136.0	109.2	82.8	68.6	59.1	51.1	42.1	35.4	18.8