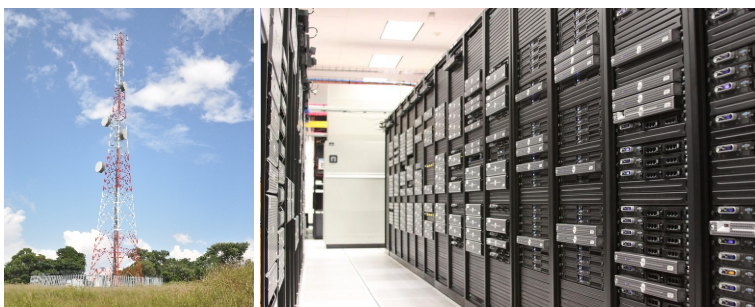


USF12-200(12V200AH)

Applications

- ◆ Telecom application
(21" / 23" rack or cabinets)
- ◆ UPS, standby power supply
- ◆ Power station systems
- ◆ Railway and marine systems



Design

- ◆ Positive plate: flat plate and grid-plate in PbCaSn-alloy
- ◆ Negative plate: flat plate and grid-plate in PbCaSn-alloy
- ◆ Electrolyte: sulphuric acid
- ◆ Separator: AGM separator
- ◆ Safety valve: valve with flame arrestor

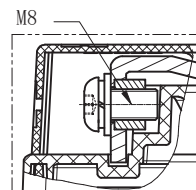
Features

- ◆ LongLife: 12 years design life
- ◆ Good deep discharge resilience performance
- ◆ Special plate design, long cycle lifetime
- ◆ High thermal capacity, reduce the risk of thermal out of control and drying hard,
- ◆ Flame retardant container UL94-V0

Terminal

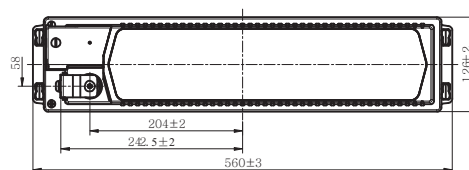
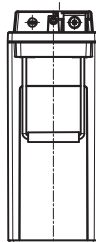
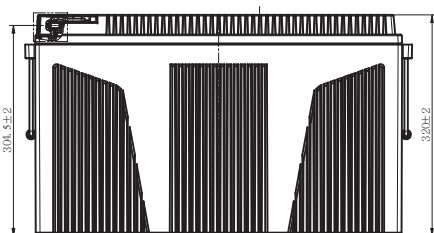
Terminal Model: T11

Unit: mm



Layout

Unit: mm



Front Terminal Battery-USF Series

Specification

Nominal Voltage	12V	
Rated Capacity (Ah)	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C)
	175.0 AH/35.0A	(5hr, 1.75V/cell, 25°C)
	118.1AH/118.1A	(1hr, 1.67V/cell, 25°C)
Dimension	Length	560 ± 2mm
	Width	126 ± 2mm
	Container Height	320 ± 2mm
	Total Height	320 ± 2mm
Approx Weight	Approx 59.5 kg	
Terminal	M8	
Container Material	ABS	
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 3.0mΩ	
Operating Temp. Range	Discharge: -15 ~ 50°C Charge: 0 ~ 40°C Storage: -15 ~ 40°C	
Capacity affected by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Cycle Use	Initial Charging Current less than 60.0A.	
	Voltage: 14.4V at 25°C	Temp. coefficient -30mV/°C
Standby Use	Equalization voltage: 14.1V at 25°C Temp. coefficient -20mV/°C	
	Float voltage: 13.5V at 25°C	Temp. coefficient -20mV/°C
Self Discharge	USF series batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



ISO9001



ISO14001

Performance

Constant Current Discharge (Amperes) at 25 °C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h
1.85V/cell	287.5	256.2	226.7	185.7	143.2	97.3	63.3	47.7	38.0	31.8	28.7	22.4	18.7	16.5
1.80V/cell	334.0	298.0	252.9	199.6	151.4	107.6	68.8	51.6	41.0	34.2	29.5	23.7	20.0	17.6
1.75V/cell	368.6	315.2	269.6	207.6	156.1	111.3	70.9	53.0	42.0	35.0	29.9	24.4	20.3	18.0
1.70V/cell	392.5	333.1	280.4	214.7	159.1	115.7	73.2	54.6	43.1	35.8	30.3	24.9	20.6	18.3
1.67V/cell	410.4	343.6	286.3	219.1	162.5	118.1	74.4	55.4	43.7	36.2	30.6	25.1	20.8	18.5
1.60V/cell	428.3	368.0	294.7	223.5	164.9	123.9	77.5	57.4	45.1	37.4	30.9	25.7	21.3	18.9

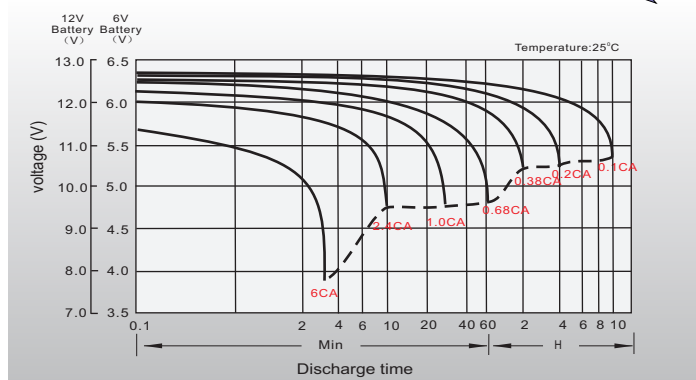
Constant Power Discharge (Watts/cell) at 25 °C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h
1.85V/cell	536.8	491.0	431.8	357.7	278.0	188.6	123.3	93.3	74.5	62.4	57.1	44.2	37.0	33.1
1.80V/cell	616.5	565.0	474.8	378.7	291.7	207.3	133.5	100.6	80.0	67.0	58.3	46.6	40.0	34.9
1.75V/cell	669.5	591.5	501.3	390.5	298.1	212.9	136.8	102.8	81.7	68.3	59.0	48.0	40.0	35.7
1.70V/cell	696.9	618.1	517.4	401.8	302.5	219.8	140.5	105.3	83.5	69.7	59.7	48.7	40.5	36.1
1.67V/cell	725.8	639.2	526.3	409.1	308.1	223.3	142.3	106.6	84.5	70.4	60.1	49.2	40.8	36.4
1.60V/cell	736.6	666.4	534.0	411.9	309.2	231.9	147.2	109.9	86.8	72.2	60.4	50.2	41.6	37.1

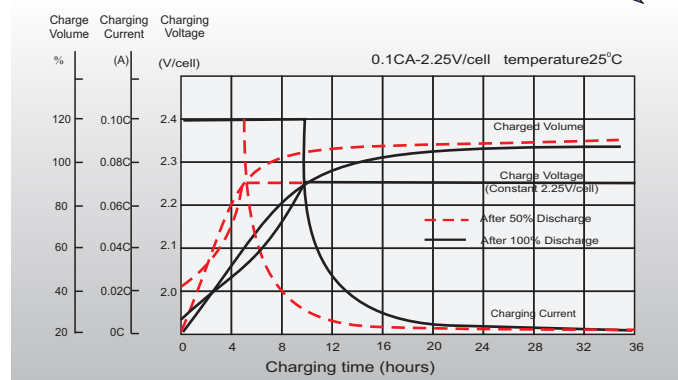
Front Terminal Battery-USF Series

Characteristic Curve

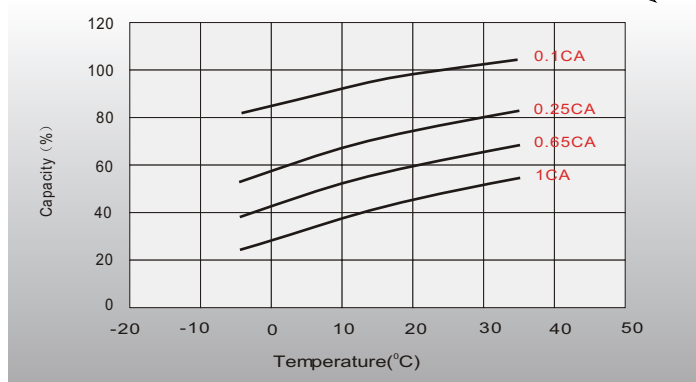
Discharge Characteristics



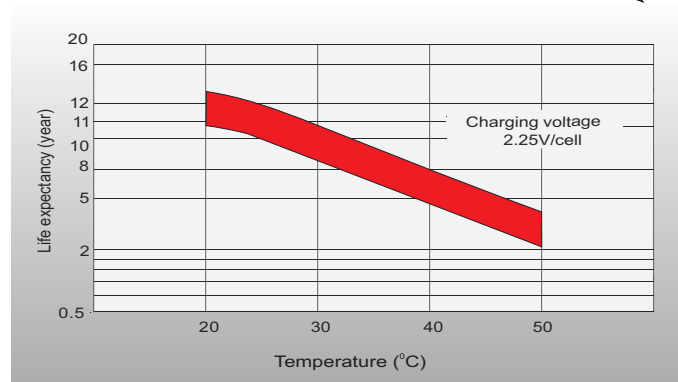
Float Charging Characteristics



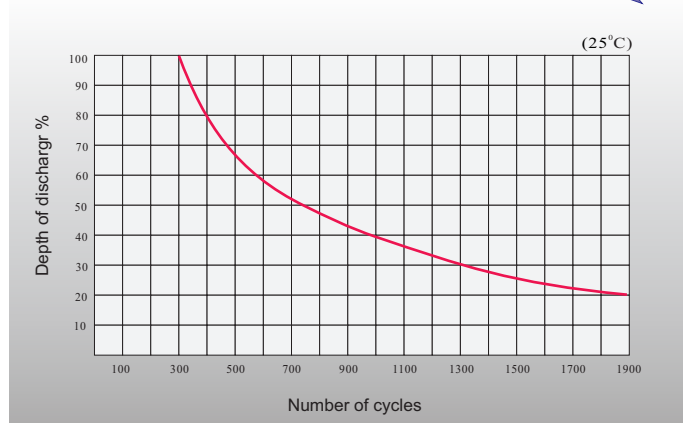
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

