SIKORA
Notbeleuchtungssysteme

LL SERIES-Long Life

LL12120 (12V 120AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	120AH	
Dimension	Length	408±3mm (16.1 inches)
	Width	177±2mm (6.97 inches)
	Container Height	225±3mm (8.86 inches)
	Total Height (with Terminal)	225±3mm (8.86 inches)
Approx Weight	Approx 36.6 Kg (80.7 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	132.2 AH/6.61A	(20hr ,1.80V/cell,25°C/77°F)
	120.0 AH/12.0A	(10hr,1.80V/cell,25°C/77°F)
	107.5AH/21.5A	(5hr,1.75V/cell,25°C/77°F)
	97.2 AH/32.4A	(3hr,1.75V/cell,25°C/77°F)
	80.4 AH/80.4A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	1440A (5s)	
Internal Resistance	Approx 6.0 mΩ	
Operating Temp.Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than36.0A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LL series batteries may be stored for up to 6 months at 20°C(68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- *UPS and EPS*
- *Emergency light*
- *Railway signal and aircraft signal system*
- *Marine and power stations Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply, DC power supply*

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	165.7	137.0	119.5	97.3	73.7	62.0	39.3	29.0	23.6	19.8	17.4	13.9	11.5	6.39
1.80V/cell	189.6	153.8	132.0	105.7	79.5	65.3	42.3	31.2	25.0	21.0	18.4	14.6	12.0	6.61
1.75V/cell	215.4	173.3	145.9	114.8	86.8	71.3	44.0	32.4	26.0	21.5	19.0	15.1	12.3	6.78
1.70V/cell	243.2	192.3	161.1	125.4	93.5	75.4	46.3	34.1	27.1	22.8	19.9	15.8	12.8	6.95
1.65V/cell	261.1	205.9	171.3	132.3	98.9	78.0	48.0	35.6	28.1	23.5	20.6	16.4	13.2	7.17
1.60V/cell	287.3	225.5	186.2	141.2	102.7	80.4	49.3	36.4	28.7	24.0	21.0	16.6	13.4	7.28

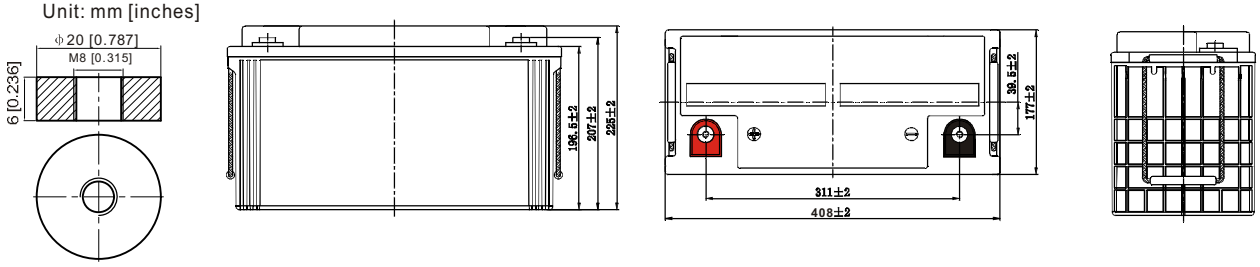
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	309.4	258.3	227.5	187.4	143.2	120.7	77.3	57.2	46.6	39.2	34.5	27.8	23.2	12.8
1.80V/cell	349.9	286.2	247.8	200.5	153.3	126.8	82.5	61.0	49.2	41.4	36.4	29.1	24.0	13.2
1.75V/cell	391.1	318.7	271.3	216.0	165.7	137.6	85.4	63.3	50.8	42.2	37.4	30.1	24.5	13.5
1.70V/cell	431.8	348.7	297.3	234.6	177.8	145.2	89.9	66.5	52.9	44.6	39.1	31.3	25.5	13.9
1.65V/cell	459.5	370.5	314.0	245.5	186.5	149.0	92.6	68.8	54.8	45.8	40.4	32.2	26.2	14.3
1.60V/cell	494.1	399.2	337.3	260.2	192.7	152.7	94.6	70.3	55.8	46.9	41.1	32.8	26.7	14.5

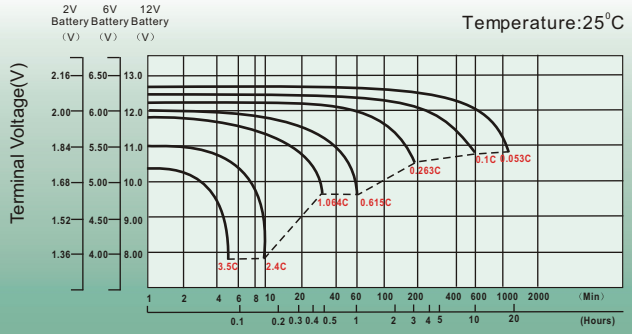
Dimensions

T11 Terminal

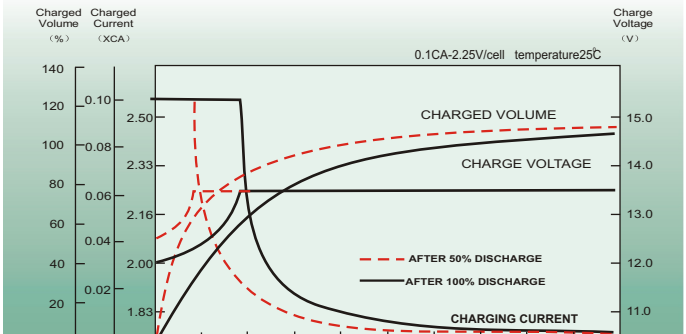
Unit: mm [inches]



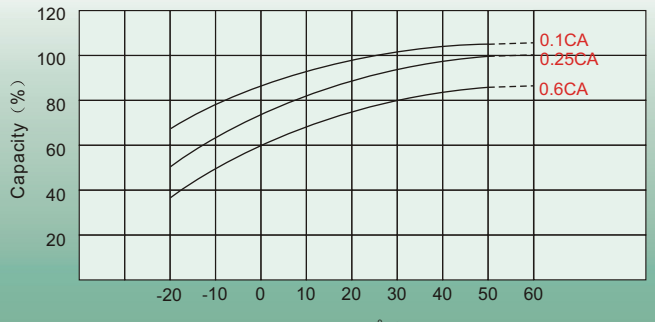
Discharge Characteristics



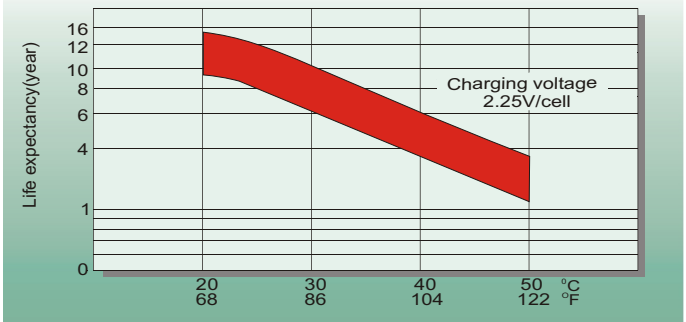
Float Charging Characteristics

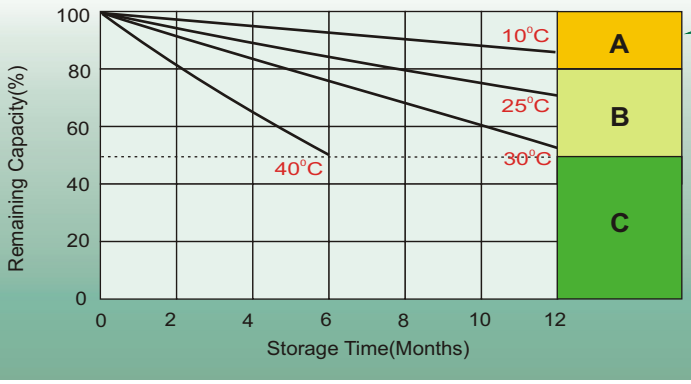


Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life





Self Discharge Characteristics

A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.