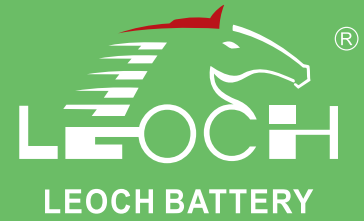


IEEE/UL Battery
Sizing by
MooreU
610-952-6067
www.mooreu.com



OPzS Series-Flooded Battery

10 OPzS1000(2V1000Ah)

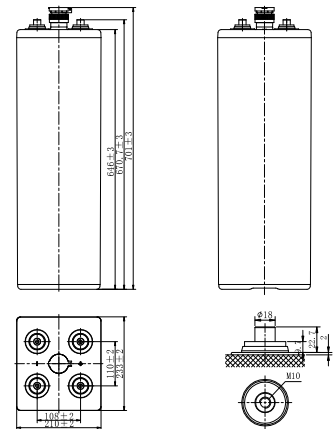


Specifications

Rated Voltage	2V	
Nominal Capacity	C ₁₀ , 1.80V/cell	1000.0Ah
Dimension	Length	233±2mm (9.13 inches)
	Width	210±3mm (8.27 inches)
	Container Height	646±3mm (25.43 inches)
	Total Height	701±3mm (27.60 inches)
Approx Weight	Without Electrolyte	57.4kg (126.3lbs)
	With Electrolyte	77.4 kg (170.3lbs)
Terminal	M10	
Container Material	SAN transparent container	
Rated Capacity	1000.0 Ah	(10hr, 100.0A, 1.80V/cell)
	888.0 Ah	(5hr, 177.6A, 1.75V/cell)
	771.0 Ah	(3hr, 257.0A, 1.75V/cell)
	571.0 Ah	(1hr, 571.0A, 1.60V/cell)
Max. Discharge Current	8000A (5s)	
Internal Resistance (20°C)	Approx 0.45mΩ	
Operating Temp. Range	Discharge	-15 ~ 55°C (5 ~ 131°F)
	Charge	0 ~ 45°C (32 ~ 113°F)
	Storage	-15 ~ 45°C (5 ~ 113°F)
Nominal Operating Temp. Range	25±5°C (77±9°F)	
Cycle Use	Initial Charging Current less than 0.15CA. Voltage	
	2.40V~2.45V at 20°C(68°F)Temp. Coefficient -5mV/°C	
Standby Use	Initial Charging Current less than 0.15CA. Voltage	
	2.23V~2.25V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	20°C (68°F)	100%
	0°C (32°F)	86%
Self Discharge	≤4% per month at 20°C	



Layout



Constant Current Discharge (Amperes) at 20 °C (68°F)

F. V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	397.0	290.0	223.3	184.9	159.6	140.2	114.2	95.7	52.6	44.1	15.83	11.87	10.17
1.80V/cell	464.0	319.5	244.0	199.9	170.3	148.8	120.2	100.0	54.7	45.9	16.46	12.34	10.57
1.75V/cell	504.0	340.0	257.0	208.8	177.6	154.5	123.6	102.2	55.7	46.7	16.8	12.56	10.77
1.70V/cell	531.0	355.0	265.3	215.3	182.4	158.3	125.6	104.0	56.7	/	/	/	/
1.65V/cell	552.0	363.5	273.3	220.3	186.5	161.4	127.9	105.7	57.5	/	/	/	/
1.60V/cell	571.0	372.0	278.0	223.5	189.0	163.6	129.5	106.9	58.0	/	/	/	/

Constant Power Discharge (Watts/cell) at 20 °C (68°F)

F. V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	742.9	547.0	423.3	351.9	305.0	269.2	220.3	185.6	102.3	85.8	30.6	22.8	19.53
1.80V/cell	855.7	596.0	457.6	376.5	322.7	283.6	230.0	192.3	105.5	88.4	31.5	23.6	20.14
1.75V/cell	917.7	628.6	478.3	390.9	335.0	292.7	235.2	195.5	107.0	89.7	32.0	23.9	20.4
1.70V/cell	957.8	651.6	490.8	401.0	342.5	298.9	238.4	197.9	108.3	/	/	/	/
1.65V/cell	988.2	664.3	503.1	409.0	348.7	303.7	241.7	200.6	109.4	/	/	/	/
1.60V/cell	1013.8	676.5	509.2	412.9	351.6	306.3	243.4	201.9	109.9	/	/	/	/



OPzS Series-Flooded Battery

10 OPzS1000(2V1000Ah)



Applications

- Telecommunications
- Buoy lighting
- Standby power
- Railway signalling
- Emergency lighting systems
- Alternative power (solar, wind)
- Maritime standby power on ships and ashore

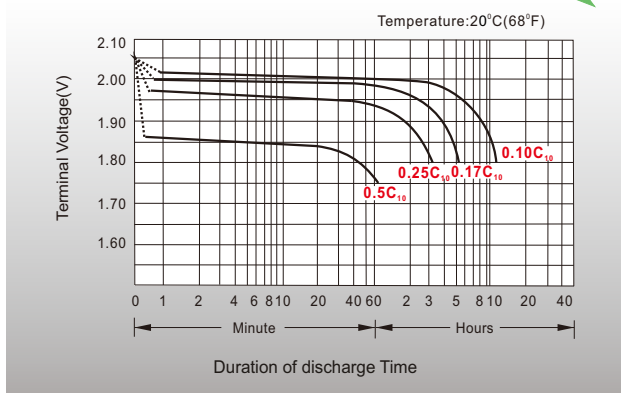
General Features

- 20 years design life(20°C)
- Lower self discharge
- Higher thermal capacity, no thermal runaway will occur
- Superior deep cycle performance
- Wide operation temperature range

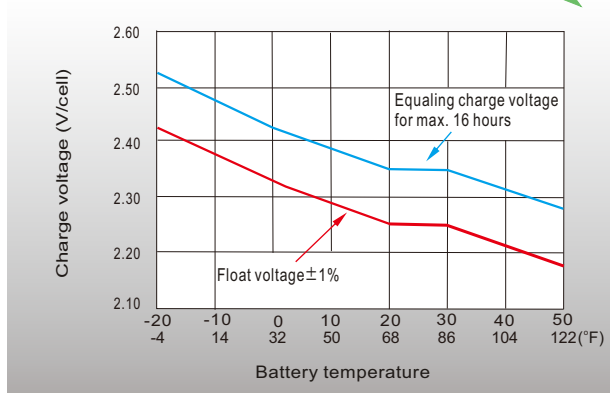
Standards

- Acc. to IEC60896, DIN 40736 standards
- Manufactured in Leoch@IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

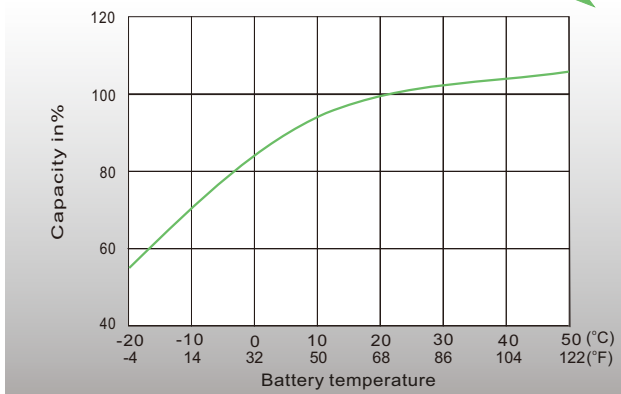
Discharge Characteristics



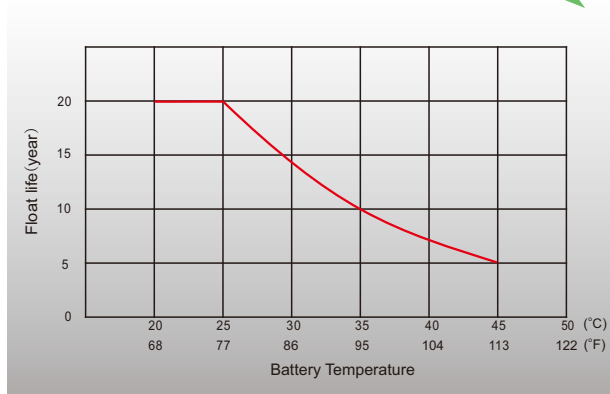
Charge voltage Vs ambient temperature curve



Discharge capacity Vs Ambient temperature curve (10A)



Effect of Temperature on Long Term Float Life



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