



# OPzS Series-Flooded Battery

## 2 OPzS100(2V100Ah)

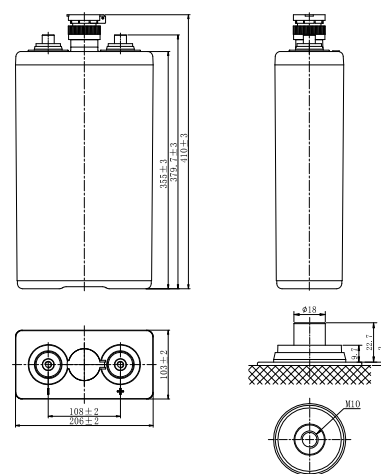


### Specifications

Rated Voltage	2V	
Nominal Capacity	$C_{10}, 1.80V/cell$	100.0Ah
Dimension	Length	103±2mm (4.06 inches)
	Width	206±2mm (8.11 inches)
	Container Height	355±3mm (13.98 inches)
	Total Height	410±3mm (16.14 inches)
Approx Weight	Without Electrolyte	8.1kg (17.86lbs)
	With Electrolyte	13.2 kg (29.11lbs)
Terminal	M10	
Container Material	SAN transparent container	
Rated Capacity (25°C)	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	89.0 Ah	(5hr, 17.8A, 1.75V/cell)
	77.1 Ah	(3hr, 25.7A, 1.75V/cell)
	57.1 Ah	(1hr, 57.1A, 1.60V/cell)
Max. Discharge Current	800A (5s)	
Internal Resistance (25°C)	Approx 1.5mΩ	
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±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 0.1CA. Voltage 2.35V~2.40V at 20°C(68°F)Temp. Coefficient -3mV/°C	
	Standby Use	
Effect of temp. to Capacity	Initial Charging Current less than 0.1CA. Voltage 2.25V~2.30V at 20°C(68°F)Temp. Coefficient -2mV/°C	
	40°C (104°F)	103%
	25°C (77°F)	100%
Self Discharge	0°C (32°F)	86%
	≤4% per month at 25°C	



### Layout



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

F.V/Time	30 min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	75.8	65.9	57.1	45.0	37.2	27.8	22.4	18.9	16.4	12.9	10.7	5.80
1.65V/cell	71.2	63.3	55.2	43.9	36.4	27.3	22.0	18.6	16.1	12.8	10.6	5.75
1.70V/cell	67.6	59.7	53.1	42.5	35.5	26.5	21.5	18.2	15.8	12.6	10.4	5.67
1.75V/cell	63.4	56.9	50.4	40.5	34.0	25.7	20.9	17.8	15.5	12.4	10.2	5.57
1.80V/cell	56.4	51.3	46.4	37.9	32.0	24.4	20.0	17.0	14.9	12.0	10.0	5.47
1.85V/cell	45.0	42.5	39.7	33.7	29.0	22.3	18.5	16.0	14.0	11.4	9.57	5.26

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

F.V/Time	30 min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	129.4	115.3	101.4	80.9	67.6	50.9	41.3	35.2	30.6	24.3	20.2	11.0
1.65V/cell	124.2	112.1	98.8	79.3	66.4	50.3	40.9	34.9	30.4	24.2	20.1	10.9
1.70V/cell	119.5	106.9	95.8	77.2	65.2	49.1	40.1	34.2	29.9	23.8	19.8	10.8
1.75V/cell	114.0	103.0	91.8	74.1	62.9	47.8	39.1	33.5	29.3	23.5	19.6	10.7
1.80V/cell	102.8	94.2	85.6	70.3	59.6	45.8	37.6	32.3	28.4	23.0	19.2	10.6
1.85V/cell	83.4	79.2	74.3	63.4	54.7	42.3	35.2	30.5	26.9	22.0	18.6	10.2



# OPzS Series-Flooded Battery

## 2 OPzS100(2V100Ah)



### Applications

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

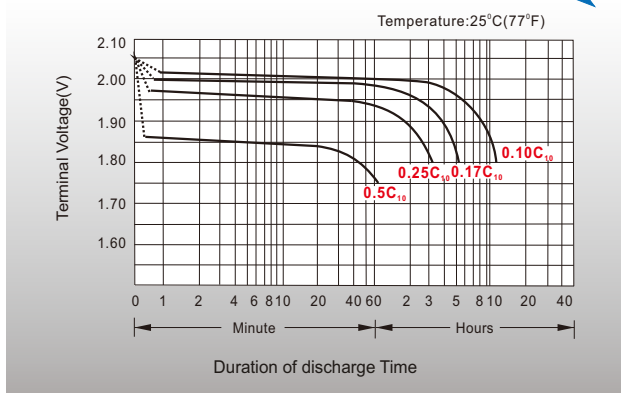
### General Features

- 20 years design life(25°C)
- Lower self discharge
- Higher thermal capacity, no thermal runaway will occur
- Superior deep cycle performance
- Wide operation temperature range

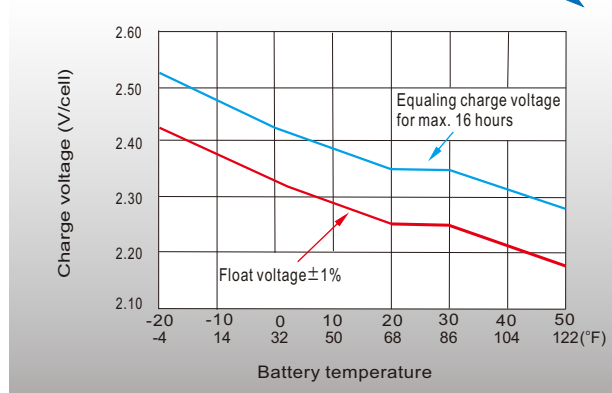
### Standards

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

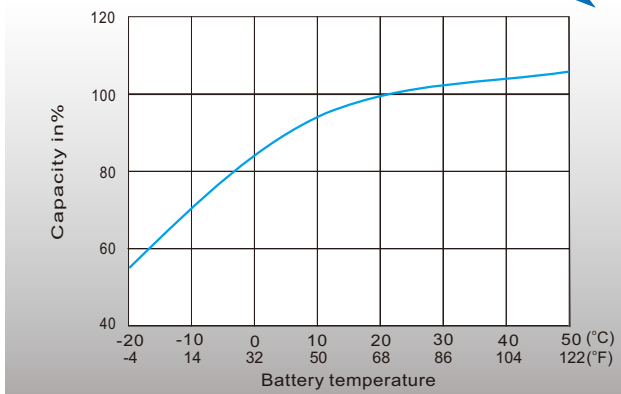
### Discharge Characteristics



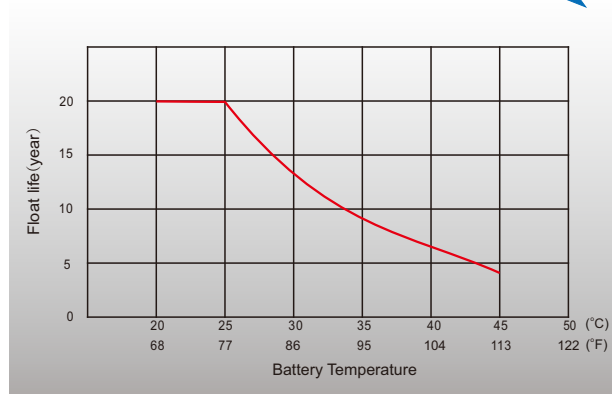
### Charge voltage Vs ambient temperature curve



### Discharge capacity Vs Ambient temperature curve (I10A)



### Float Service Life



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Publication No.:LB-2 OPzS100-PD-EN-V2.0-202102