



OPzS Series-Flooded Battery

6 OPzS420(2V420Ah)

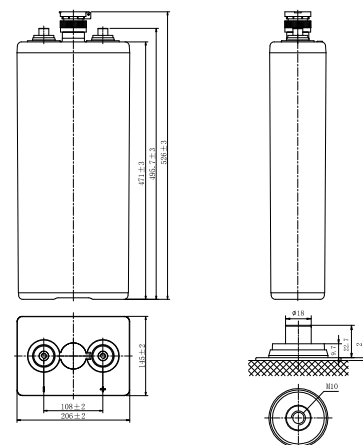


Specifications

Rated Voltage	2V	
Nominal Capacity	$C_{10}, 1.80V/cell$	420.0Ah
Dimension	Length	145±2mm (5.71 inches)
	Width	206±2mm (8.11 inches)
	Container Height	471±3mm (18.54 inches)
	Total Height	526±3mm (20.71 inches)
Approx Weight	Without Electrolyte	24.5kg (54.0lbs)
	With Electrolyte	32.7 kg (72.1lbs)
Terminal	M10	
Container Material	SAN transparent container	
Rated Capacity (25°C)	420.0 Ah	(10hr, 42.0A, 1.80V/cell)
	373.0 Ah	(5hr, 74.6A, 1.75V/cell)
	323.7 Ah	(3hr, 107.9A, 1.75V/cell)
	239.8 Ah	(1hr, 239.8A, 1.60V/cell)
Max. Discharge Current	3360A (5s)	
Internal Resistance (25°C)	Approx 0.88mΩ	
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	Initial Charging Current less than 0.1CA. Voltage	
	2.25V~2.30V at 20°C(68°F)Temp. Coefficient -2mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤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	318.4	276.6	239.8	189.0	156.2	116.8	93.9	79.4	68.7	54.4	44.9	24.4
1.65V/cell	299.0	266.0	231.8	184.2	152.7	114.8	92.5	78.3	67.8	53.7	44.4	24.1
1.70V/cell	283.9	250.9	223.0	178.4	149.1	111.4	90.4	76.6	66.5	52.8	43.7	23.8
1.75V/cell	266.3	239.1	211.7	170.0	142.8	107.9	87.7	74.6	64.9	51.9	42.9	23.4
1.80V/cell	236.9	215.6	194.9	159.3	134.2	102.5	83.9	71.5	62.5	50.5	42.0	23.0
1.85V/cell	189.0	178.6	166.7	141.7	121.8	93.8	77.7	67.0	58.9	48.0	40.2	22.1

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	543.4	484.1	425.8	339.8	284.1	213.8	173.4	147.7	128.7	102.2	84.8	46.2
1.65V/cell	521.6	471.0	415.0	332.9	279.0	211.3	171.8	146.4	127.5	101.5	84.2	46.0
1.70V/cell	502.0	448.9	402.3	324.4	273.7	206.1	168.4	143.8	125.5	100.1	83.1	45.5
1.75V/cell	478.7	432.4	385.4	311.3	264.0	200.9	164.2	140.7	122.9	98.8	82.1	44.9
1.80V/cell	431.6	395.8	359.4	295.2	250.3	192.2	158.1	135.5	119.1	96.6	80.8	44.3
1.85V/cell	350.2	332.7	312.0	266.1	229.7	177.8	147.8	128.1	113.1	92.5	77.9	43.0



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Applications

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

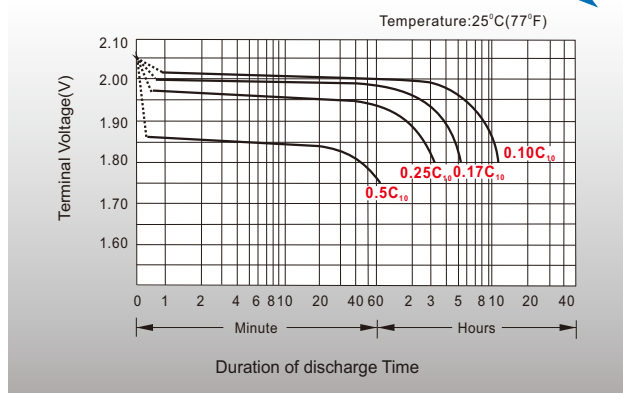
General Features

- 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

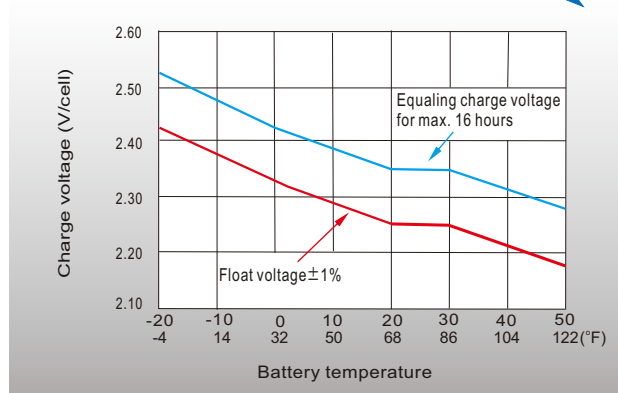
Standards

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

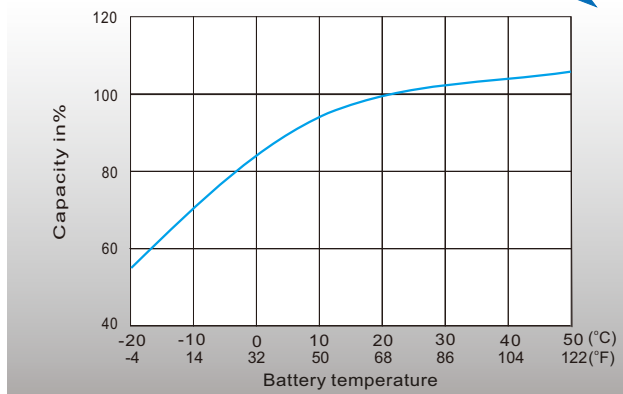
Discharge Characteristics



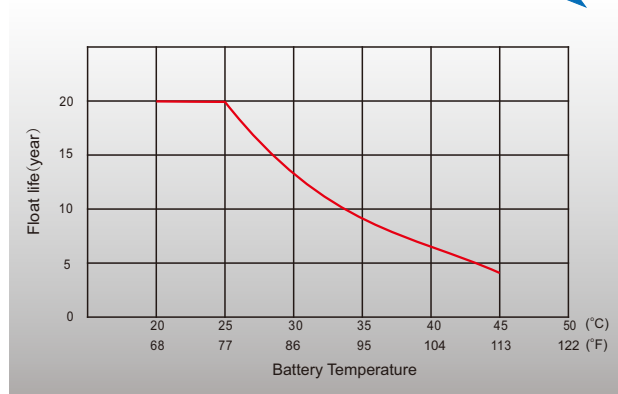
Charge voltage Vs ambient temperature curve



Discharge capacity Vs Ambient temperature curve (I10A)



Float Service Life



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