



# OPzS Series-Flooded Battery

## 3 OPzS150(2V150Ah)

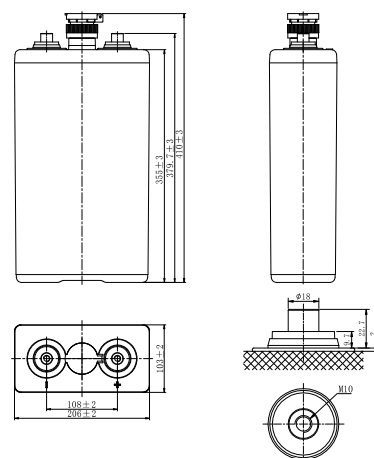


### Specifications

Rated Voltage	2V	
Nominal Capacity	$C_{10}, 1.80V/cell$	150.0Ah
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	10.8kg (23.8lbs)
	With Electrolyte	15.3 kg (33.7lbs)
Terminal	M10	
Container Material	SAN transparent container	
Rated Capacity (25°C)	150.0 Ah	(10hr, 15.0A, 1.80V/cell)
	133.0 Ah	(5hr, 26.6A, 1.75V/cell)
	115.8 Ah	(3hr, 38.6A, 1.75V/cell)
	85.7 Ah	(1hr, 85.7A, 1.60V/cell)
Max. Discharge Current	1200A (5s)	
Internal Resistance (25°C)	Approx 1.15mΩ	
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	113.7	98.8	85.7	67.5	55.8	41.7	33.5	28.4	24.5	19.4	16.0	8.70
1.65V/cell	106.8	95.0	82.8	65.8	54.5	41.0	33.0	28.0	24.2	19.2	15.9	8.62
1.70V/cell	101.4	89.6	79.7	63.7	53.3	39.8	32.3	27.4	23.7	18.8	15.6	8.50
1.75V/cell	95.1	85.4	75.6	60.7	51.0	38.6	31.3	26.6	23.2	18.5	15.3	8.36
1.80V/cell	84.6	77.0	69.6	56.9	47.9	36.6	30.0	25.5	22.3	18.0	15.0	8.20
1.85V/cell	67.5	63.8	59.6	50.6	43.5	33.5	27.7	23.9	21.0	17.1	14.4	7.88

### 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	194.1	172.9	152.1	121.3	101.5	76.4	61.9	52.7	45.9	36.5	30.3	16.5
1.65V/cell	186.3	168.2	148.2	118.9	99.6	75.5	61.3	52.3	45.5	36.3	30.1	16.4
1.70V/cell	179.3	160.3	143.7	115.9	97.7	73.6	60.2	51.4	44.8	35.8	29.7	16.2
1.75V/cell	171.0	154.4	137.7	111.2	94.3	71.7	58.6	50.2	43.9	35.3	29.3	16.0
1.80V/cell	154.2	141.4	128.3	105.4	89.4	68.6	56.5	48.4	42.5	34.5	28.8	15.8
1.85V/cell	125.1	118.8	111.4	95.0	82.0	63.5	52.8	45.8	40.4	33.1	27.8	15.3



# OPzS Series-Flooded Battery

## 3 OPzS150(2V150Ah)



### Applications

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

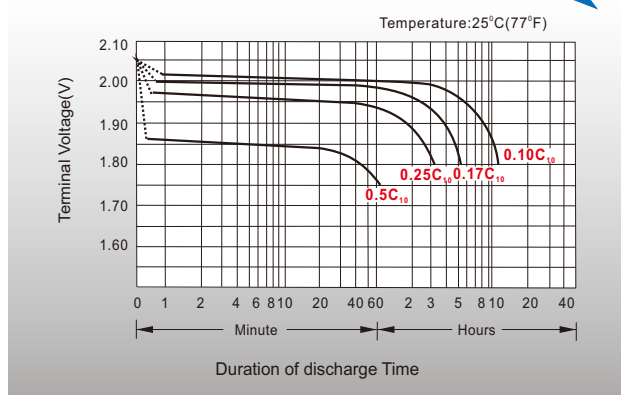
### General Features

- 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

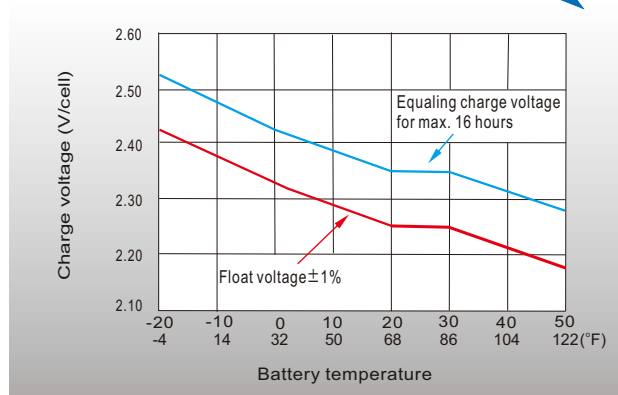
### Standards

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

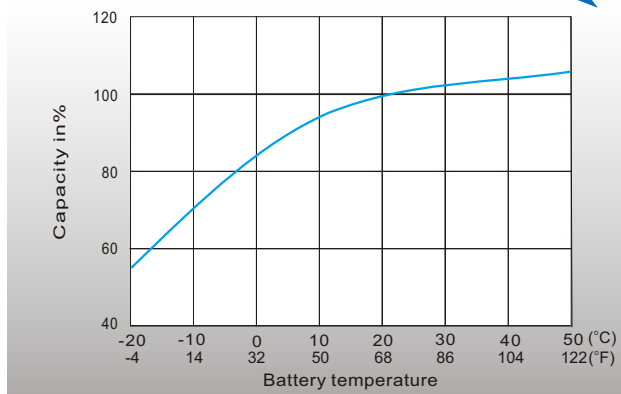
### Discharge Characteristics



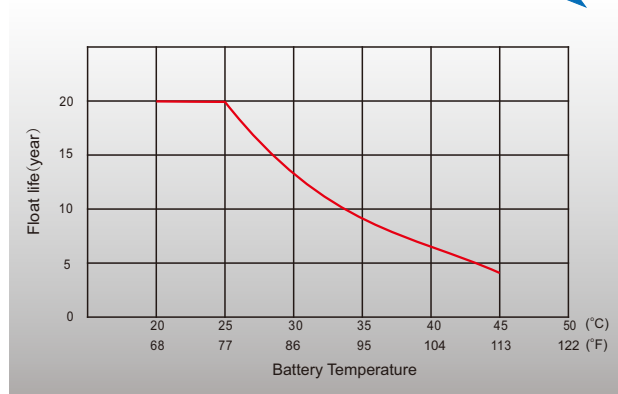
### Charge voltage Vs ambient temperature curve



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



### Float Service Life



## Sales Offices Worldwide

#### China Sales Office

5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com

#### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

#### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

#### Australia Sales Office

2/29 Tarlington Place, Smithfield. NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

#### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

#### UK Sales Office

9B Wheatstone Court. Waterwells, Business Park,  
Gloucester, GL2-2AQ, UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 1452 690125  
E-mail: Sales.Europe@leoch.com

#### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

#### India Sales Office

Shed no.A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com



[Http://www.leoch.com](http://www.leoch.com)  
[Http://www.leoch.us](http://www.leoch.us)

© 2021 LEOCH. All rights reserved.

Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.  
Subject to revisions without prior notice.

Publication No.:LB-3 OPzS150-PD-EN-V2.0-202102