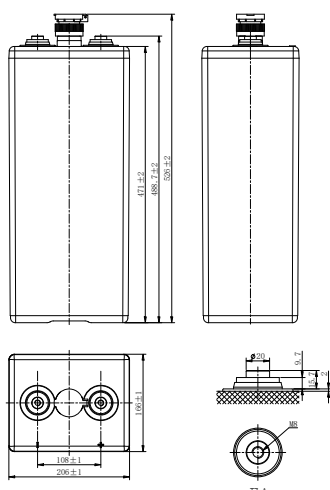
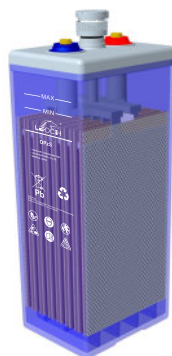


OPzS SERIES-FLOODED BATTERY

7OPzS490 (2V490Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	2V	
Nominal Capacity (20°C)	C ₁₀ , 1.80V/cell	490Ah
Dimension	Length	166mm(6.54inches)
	Width	206mm(8.11inches)
	Container Height	471mm(18.5inches)
	Total Height	526mm(20.7inches)
Approx Weight	35.8kg(78.9lbs)	
Dry Weight	25.5kg(56.2lbs)	
Terminal	T7-A(M8)	
Container Material	SAN transparent container	
Short-circuit current	3675A	
Internal Resistance (20°C)	Approx 0.75 mΩ (Fully charged)	
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)	
Max.Charging Current (20°C)	0.15C	
Charge voltage (20°C)	Standby Use	Cycle Use
	2.23-2.25V/cell	2.40-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	20°C (68°F)	100%
	0°C (32°F)	86%
Self Discharge	≤4% per month at 20°C	

DISCHARGE TABLE

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	168.7	127.6	104.9	89.6	77.4	69.0	55.4	47.4	26.5	22.3	8.13	6.21	5.32
1.80V/cell	201.8	148.6	118.3	98.9	83.8	74.1	59.1	50.0	27.6	23.2	8.45	6.46	5.53
1.75V/cell	230.6	166.6	125.9	104.4	87.0	75.7	60.5	51.1	28.3	23.7	8.63	6.59	5.64
1.70V/cell	249.6	170.4	130.0	106.5	89.4	77.9	61.5	52.0	28.7	/	/	/	/
1.65V/cell	258.1	174.4	133.9	109.0	91.4	79.1	62.6	52.9	29.1	/	/	/	/
1.60V/cell	265.5	178.6	136.2	110.6	92.6	80.1	63.4	53.5	29.4	/	/	/	/
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	315.6	240.6	198.8	170.5	147.8	132.4	106.8	91.8	51.5	43.5	15.8	12.1	10.4
1.80V/cell	372.1	277.1	221.8	186.3	158.7	141.1	113.1	96.1	53.1	44.9	16.3	12.5	10.7
1.75V/cell	419.8	307.9	234.3	195.4	164.1	143.3	115.2	97.7	54.2	45.6	16.6	12.7	10.9
1.70V/cell	450.2	312.6	240.3	198.2	167.7	147.1	116.6	98.9	54.7	/	/	/	/
1.65V/cell	461.9	318.8	246.4	202.3	170.7	148.7	118.3	100.2	55.4	/	/	/	/
1.60V/cell	471.3	324.8	249.3	204.3	172.1	150.0	119.3	101.0	55.8	/	/	/	/

OPzS SERIES-FLOODED BATTERY

7OPzS490 (2V490Ah)



APPLICATIONS

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

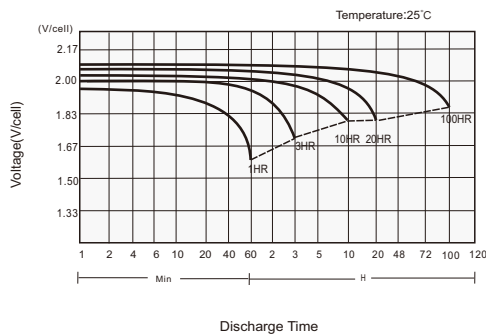
GENERAL FEATURES

- 20 years design life (20°C)
- Positive electrodes-die-cast tubular plates with low antimony lead alloy for longer life
- Transparent SAN Containers to allow electrolyte level and cell condition to be monitored visually
- Excellent standby and cycling behaviour - long life

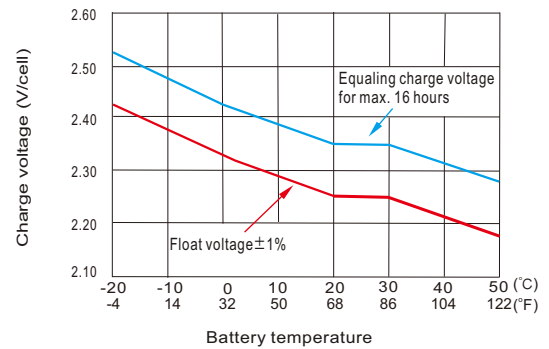
STANDARDS

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

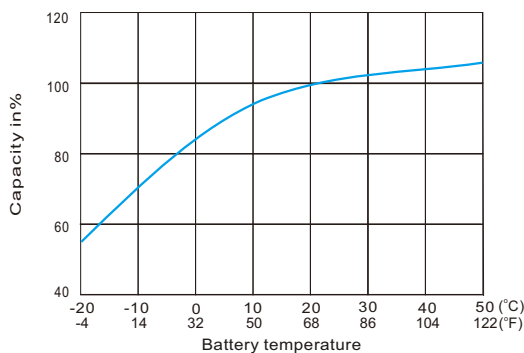
Discharge Characteristics



Charge Voltage vs Ambient Temperature Curve



Discharge Capacity vs Ambient Temperature Curve (I_{10} , A)



Self Discharge Characteristics

