

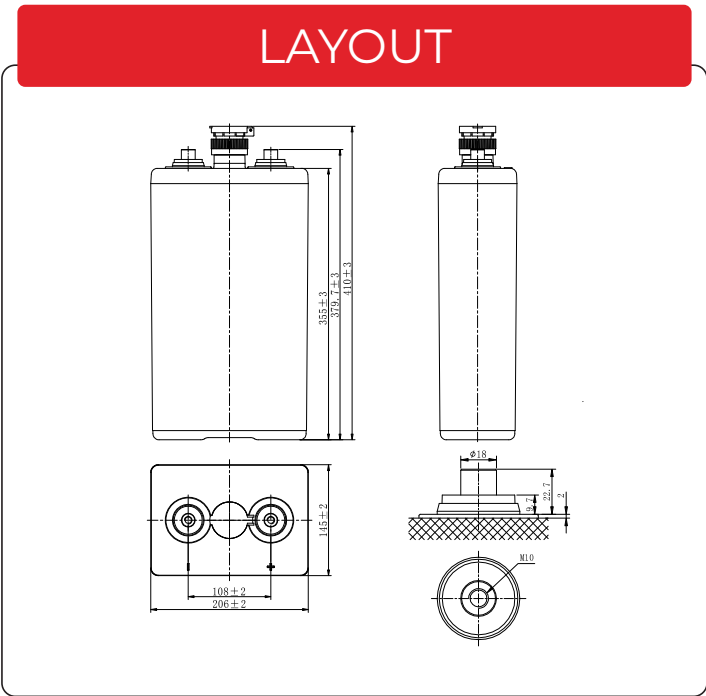
STARMAX

OPzS FLOODED TUBULAR BATTERIES

OPzS300-2



OPzS300-2 (2V 300Ah)



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

Applications

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

Standards

- ✓ ACC. to IEC60896, DIN 40736
- ✓ Manufactured by Starmax ISO 45001, ISO 9001 and ISO 14001 certified production facilities



SPECIFICATIONS

Rated Voltage	2V	
Nominal Capacity	C ₁₀ ,1.80V/cell	300.0Ah
Dimensions	Length	145±2mm (5.71 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 18.5kg (40.8lbs) With Electrolyte 24.5 kg (54.0lbs)	
Terminal	M10	
Container material	SAN transparent container	
Rated capacity (25°C)	300.0 Ah	(10hr,30.0A,1.80V/cell)
	266.5 Ah	(5hr,53.3A,1.75V/cell)
	231.3 Ah	(3hr,77.1A,1.75V/cell)
	171.3 Ah	(1hr,171.3A,1.60V/cell)
Max. discharge current	2400A (5s)	
Internal resistance (25°C)	Approx 1.00mΩ	
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	

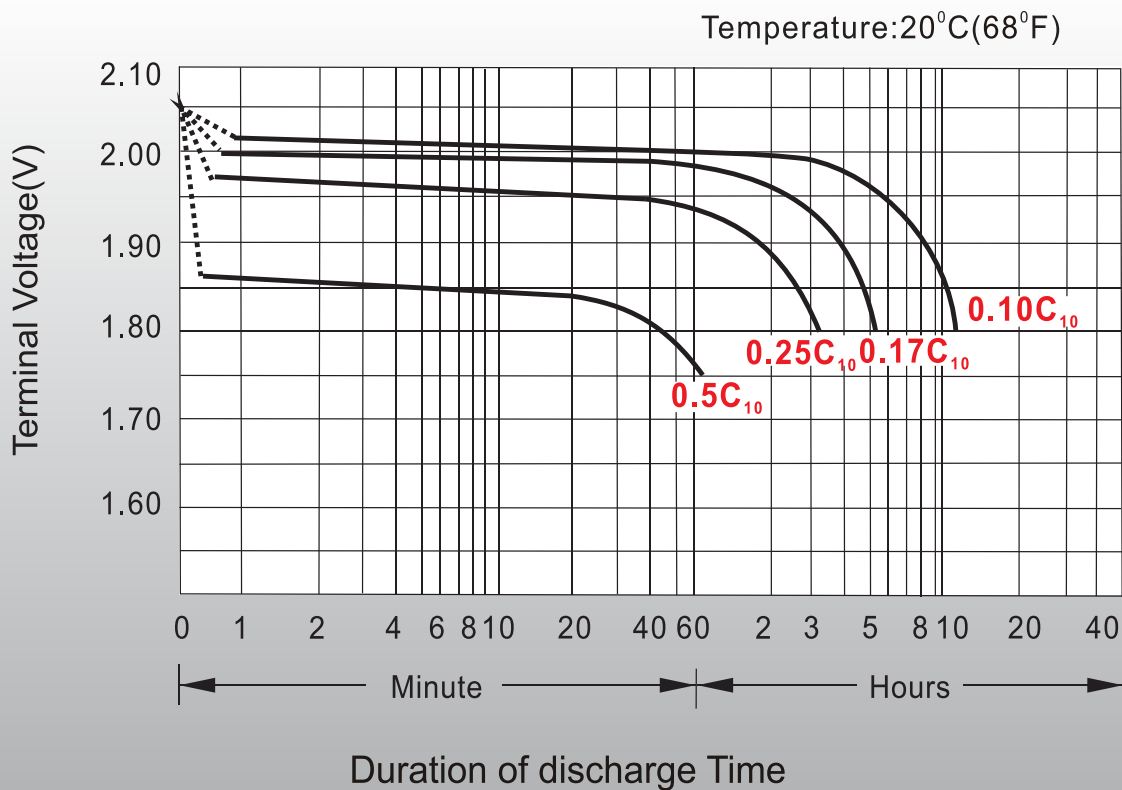
Constant Current Discharge (Amperes) at 20°C (68°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	119.1	87.0	67.0	55.5	47.9	42.1	34.3	28.7	15.8	13.3	4.75	3.56	3.05
1.80V/cell	139.2	95.9	73.2	60.0	51.1	44.7	36.1	30.0	16.4	13.8	4.93	3.69	3.16
1.75V/cell	151.2	102.0	77.1	62.6	53.3	46.4	37.1	30.7	16.7	14.0	5.02	3.76	3.22
1.70V/cell	159.3	106.5	79.6	64.6	54.7	47.5	37.7	31.2	17.0	/	/	/	/
1.65V/cell	165.6	109.1	82.0	66.1	55.9	48.4	38.4	31.7	17.2	/	/	/	/
1.60V/cell	171.3	111.6	83.4	67.1	56.7	49.1	38.8	32.1	17.4	/	/	/	/

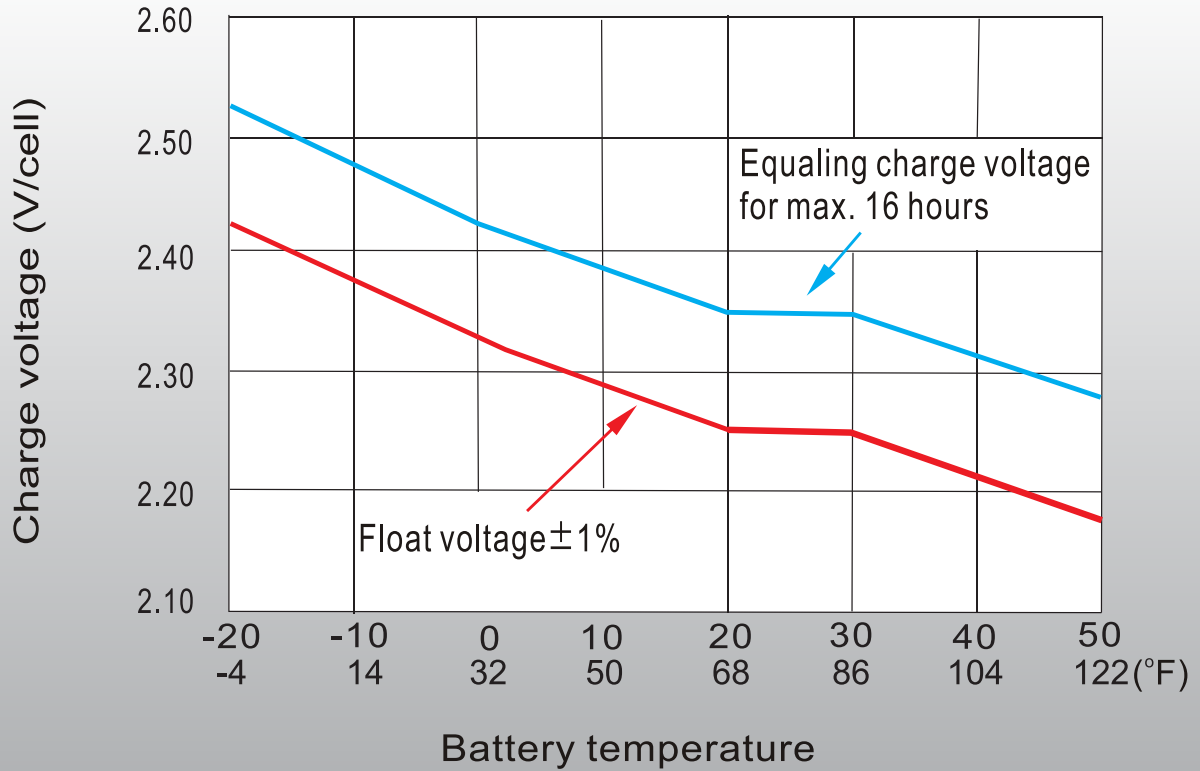
Constant Power Discharge (Watts/Cell) at 20°C (68°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	222.9	164.1	127.0	105.6	91.5	80.8	66.1	55.7	30.7	25.7	9.17	6.85	5.86
1.80V/cell	256.7	178.8	137.3	112.9	96.8	85.1	69.0	57.7	31.7	26.6	9.47	7.08	6.05
1.75V/cell	275.3	188.6	143.5	117.3	100.5	87.8	70.6	58.7	32.1	26.9	9.59	7.17	6.13
1.70V/cell	287.3	195.5	147.2	120.3	102.7	89.7	71.5	59.4	32.5	/	/	/	/
1.65V/cell	296.5	199.3	150.9	122.7	104.6	91.1	72.5	60.2	32.8	/	/	/	/
1.60V/cell	304.1	202.9	152.7	123.9	105.5	91.9	73.0	60.6	33.0	/	/	/	/

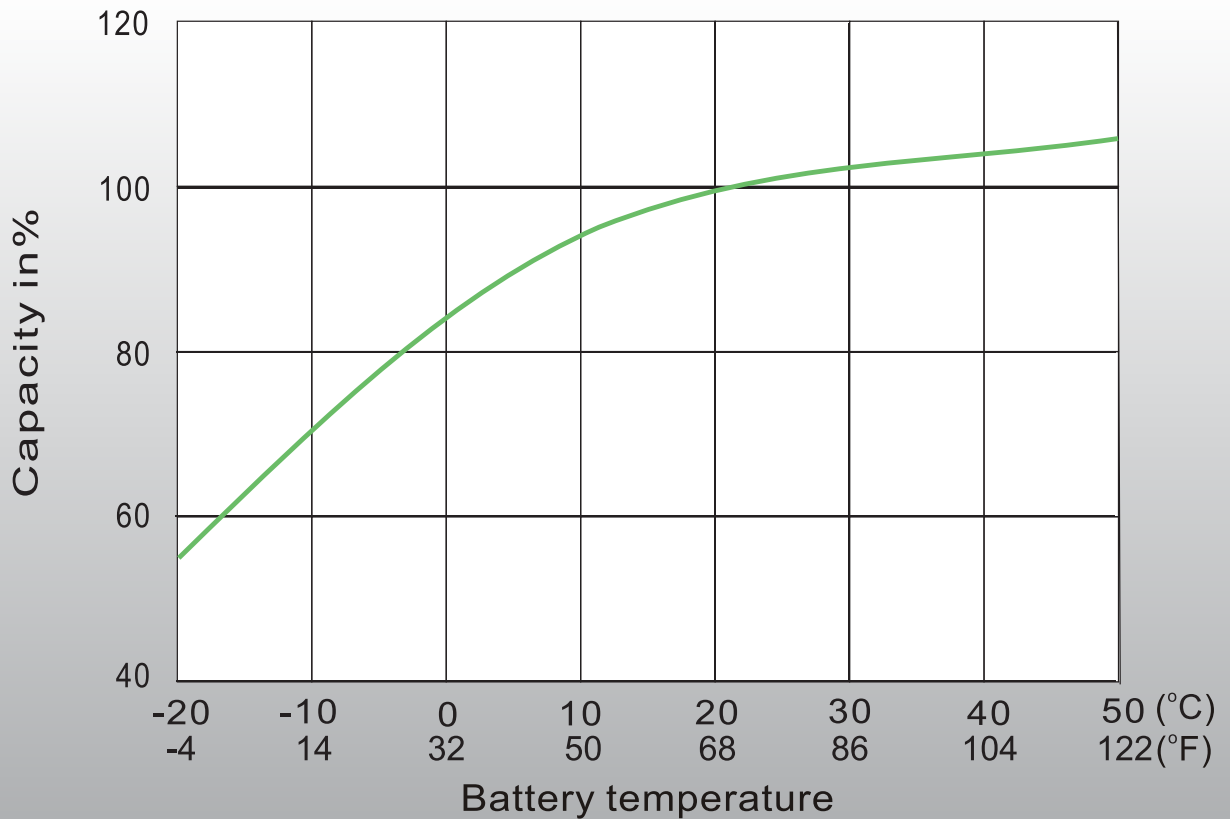
Discharge Characteristics



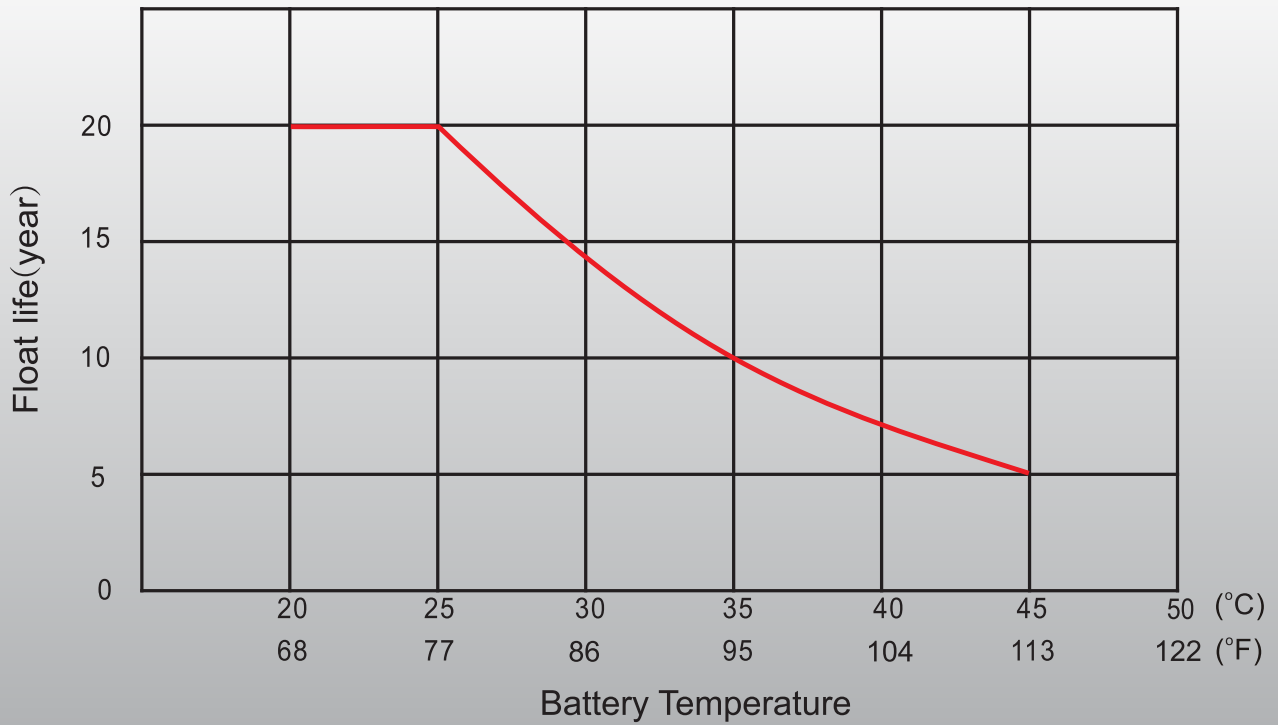
Charge Voltage vs Ambient Temperature Curve



Discharge Capacity vs Ambient Temp. Curve (110A)



Effect of Temp. on Long Term Float Life





Starmax Corporation

1585 Cliveden Avenue, Delta, British Columbia
V3M 6M1, Canada

Phone: +1 888 669 1310

Email: info@starmaxbatteries.com

Website: www.starmaxbatteries.com

