

OPzS2-150 2Volt 150Ah

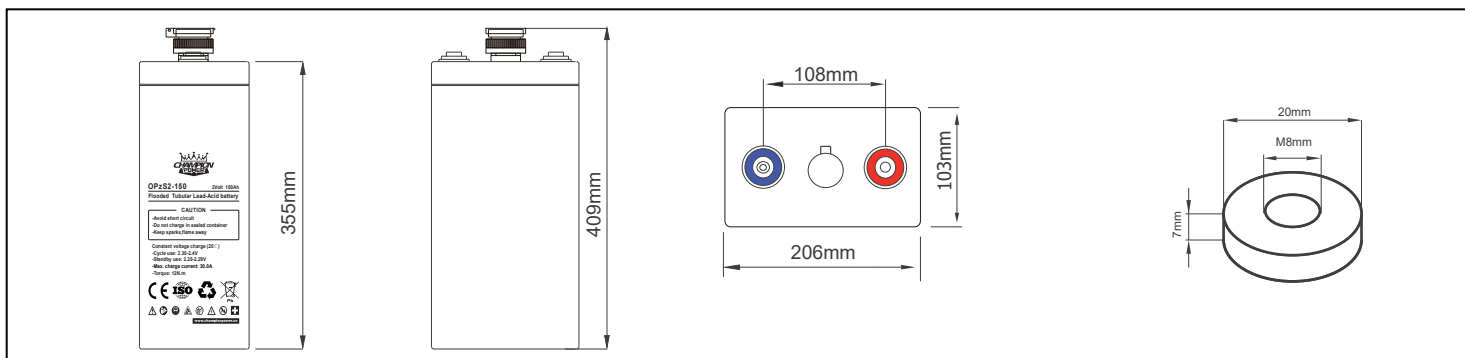
OPzS Series Battery

OPzS series is a traditional tubular plate flooded battery which offers 25+ years design life according to the standard IEC60896-11. With a new design and technical improvement, it offers maximum efficiency and reliability for the widest variety of applications. This series is highly suited for all standby power applications that require the highest levels and security.

Specification

Battery Model	Nominal Voltage	2V		
	Rated Capacity (10Hour rate)	150Ah		
Floating Design Life @ 20°C	25+ years			
Dimension	Length	Width	Height	Total Height
	103mm	206mm	355mm	399mm
Approx Weight	Dry weight	10.50Kg		
	Wet weight	14.50Kg		
Electrolyte	Diluted Sulphuric acid of 1.240g/cm ³ (20°C)			
	Acid weight: 4.0Kg			
Internal Resistance	Full charged at 20°C(77°F): Approx 0.90mΩ			
Max.Chargr Current	30A			
Max.Discharge Current	1000A(5s)			
Short Circuit Current	2400A			
Self Discharge	Approx. 4% per month @20°C			
Ambient Temperature	Discharge	-25~65°C		
	Charge	-20~65°C		
	Storage	-15~40°C		
Float Charge Voltage(20~25°C)	2.21~2.25V (-3mV/°C/cell)			
Equalize Charge Voltage(20~25°C)	2.35~2.40V(-5mV/°C/cell)			
Terminal Type	Female copper insert M8 (torque:10~12N.m)			
Container Material	SAN			

Outer dimension (mm)



Terminal Type (mm)

Constant Current Discharge Characteristics:Amps 20°C

F.V / TIME	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h
1.60V	231	159	147	118	80	55	42	35	28	19	16
1.65V	216	146	134	111	77	54	41	34	28	19	16
1.70V	183	125	119	102	72	53	40	34	27	19	15
1.75V	162	115	108	93	69	51	40	33	27	18	15
1.80V	148	109	98	79	63	49	39	32	26	18	15
1.85V	108	83	76	66	52	43	35	30	25	17	14
1.90V	69	53	52	48	41	35	29	26	22	16	13

Long Time Dscharge Capacity

Capacity (Ah)	C ₁₀	C ₂₀	C ₂₄	C ₄₈	C ₇₂	C ₁₀₀	C ₁₂₀	C ₂₄₀
		150	164	169	186	195	203	206
Final Voltage	1.80V		1.85V					

Constant Power Discharge Characteristics:W/caell 20°C

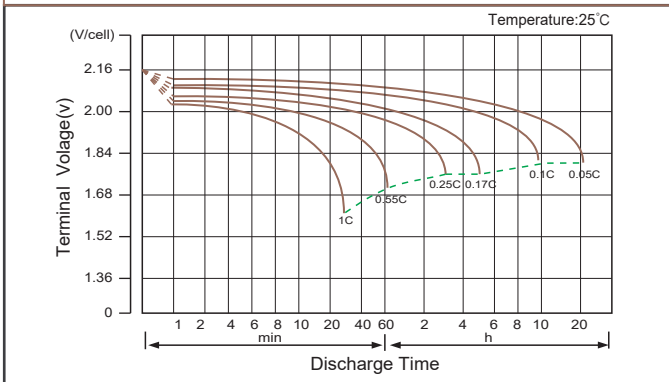
F.V / TIME	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h
1.60V	381	271	251	205	140	99	76	64	52	36	30
1.65V	366	254	234	197	138	99	76	64	52	36	30
1.70V	320	221	211	184	132	97	75	63	51	36	30
1.75V	287	206	195	169	126	95	75	62	51	35	29
1.80V	267	198	180	146	118	92	74	62	50	35	29
1.85V	200	155	143	124	99	83	68	59	49	34	28
1.90V	133	103	100	94	80	69	59	51	44	31	26

Parameters Settings

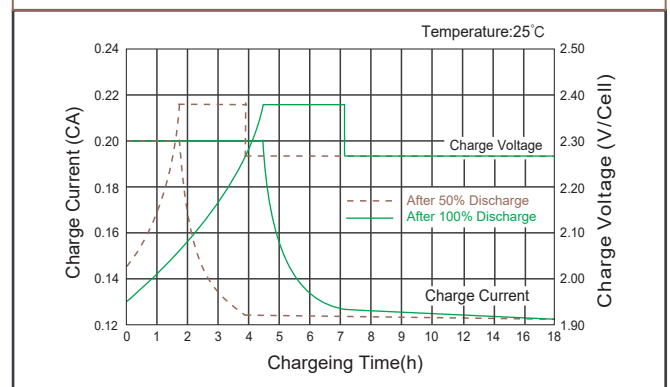
Over voltage disconnect	2.47±0.01V/cell @ 20~25°C
Regulation/equalize voltage	2.40±0.01V/cell @ 20~25°C
Array roconnection voltage	2.23±0.005V/cell @ 20~25°C
Float voltage setting	2.25±0.005V/cell @ 20~25°C
Low voltage alarm voltage	1.95±0.005V/cell @ 20~25°C
Low voltage disconnect	1.90±0.005V/cell @ 20~25°C
Load reconnect voltage	2.09±0.01V/cell @ 20~25°C
Temp. compensate coefficient	-4mV/cell/°C

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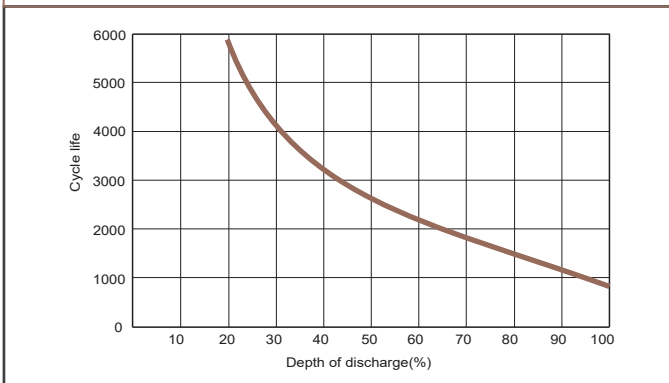
Discharge characteristic Curve



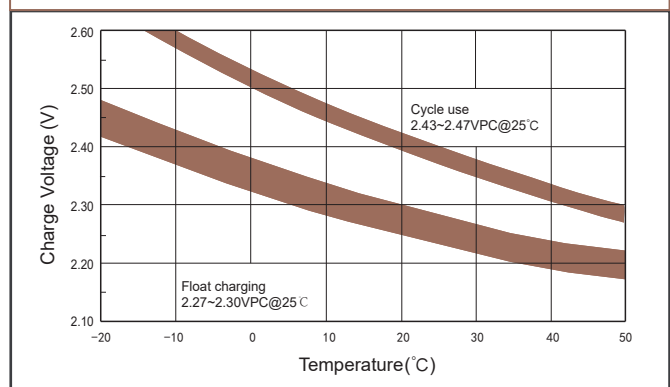
Charge Characteristic Curve for Cycle Use(IUU)



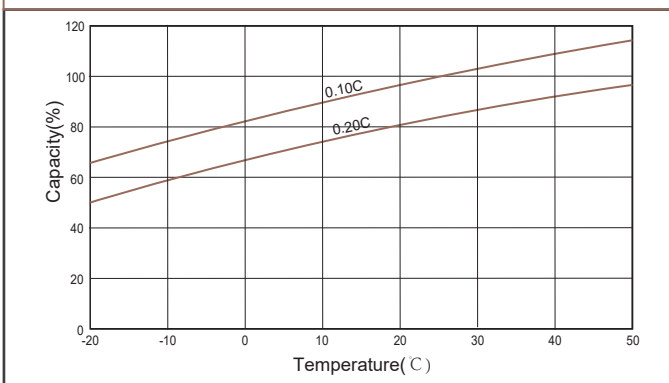
Cycle Life vs Depth of Discharge



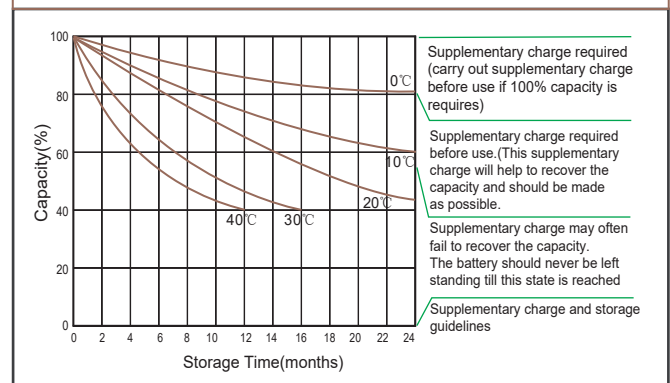
Relationship Between Charging Voltage And Temperature



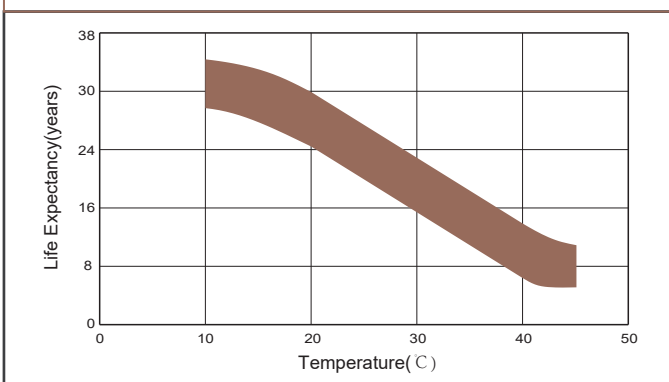
Temperature Effects On Capacity



Storage Characteristics



Effect Of emperature On Long Term Life



Relationship of OCV And State of Charge(20°C)

