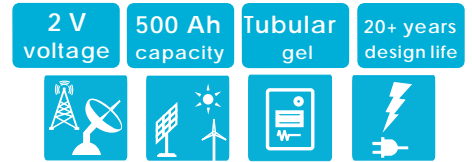


2V TUBULAR GEL SERIES VRLA BATTERY

The OPzV series adopts an Immobilized Gel and Tubular Positive Plate technology. It offers high reliability and stable performance. By using die-casted positive grid and patented active material formula, it exceeds the DIN standard values and offer 20+ years design life in float service. It is very suitable for cyclic use under extreme operating conditions. This series is recommended for telecom outdoor applications, renewable energy systems and other harsh environment applications.



SPECIFICATIONS

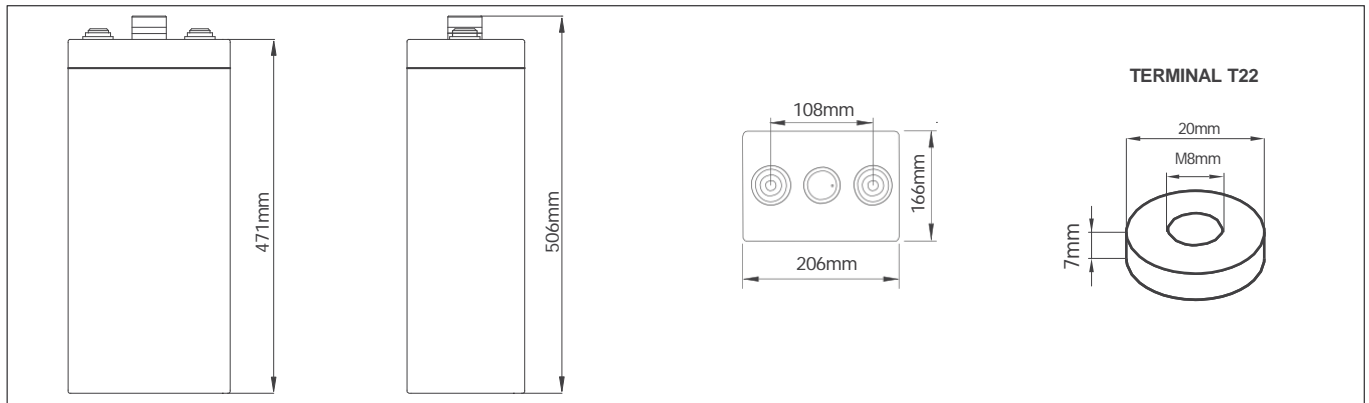
Nominal Voltage (V)	2
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	500 Ah @ C10 (to 1.80Vpc)
Dimensions	L166mm×W206mm×H506mm
Approx. Weight	31.3 kg (69.0 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.75mOhm (fully charged @ 20°C)
Max. Charge Current	100 A
Max. Discharge Current (5S)	2000 A
Short Circuit Current	2600 A
Self Discharge	Approx. 2% per month @ 20°C
Ambient Temperature	Discharge: -40~65°C Charge: -30~65°C Storage: -25~45°C
Float Charge Voltage (20~25°C)	2.25-2.29V (-3mV / °C/ cell)
Equalize Charge Voltage (20~25°C)	2.35-2.40V (-5mV / °C/ cell)
Container Material	ABS(UL94-V0 optional)



Complied standards

- IEC 60896-21/22
- DIN40742
- IEC61427
- YD/T1360
- Eurobat guide, long life
- BS6290 part 4

DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (20°C)

F.V/T ime	10 min	15 min	30 min	1 h	2 h	3 h	5 h	8 h	10 h
1.90V	180	175	163	137	117	98.0	72.6	51.9	42.9
1.87V	245	229	203	160	131	108	78.7	55.1	45.3
1.85V	282	258	222	175	144	116	83.8	57.7	47.1
1.83V	328	287	240	193	154	123	85.8	59.5	48.0
1.80V	367	333	269	212	162	129	87.5	60.3	49.0
1.75V	390	366	315	231	169	132	89.2	61.3	50.5
1.70V	424	402	346	244	176	135	90.7	62.2	51.5
1.65V	495	452	377	260	181	137	92.6	63.2	52.4
1.60V	539	497	400	268	185	140	94.6	64.4	53.4

Constant Power Discharge Characteristics: W/cell (20°C)

F.V/T ime	10 min	15 min	30 min	1 h	2 h	3 h	5 h	8 h	10 h
1.90V	347	338	318	269	231	195	145	104	86.7
1.87V	464	435	388	309	255	213	156	110	90.8
1.85V	526	484	420	334	278	226	165	114	93.7
1.83V	606	533	449	364	294	237	167	115	94.5
1.80V	669	609	496	396	306	245	168	116	95.5
1.75V	697	659	573	425	316	248	169	117	97.2
1.70V	748	713	621	443	324	250	170	118	98.3
1.65V	859	790	667	465	329	252	172	119	99.1
1.60V	916	850	693	471	331	253	174	120	100

PARAMETERS FOR SOLAR & WIND APPLICATIONS

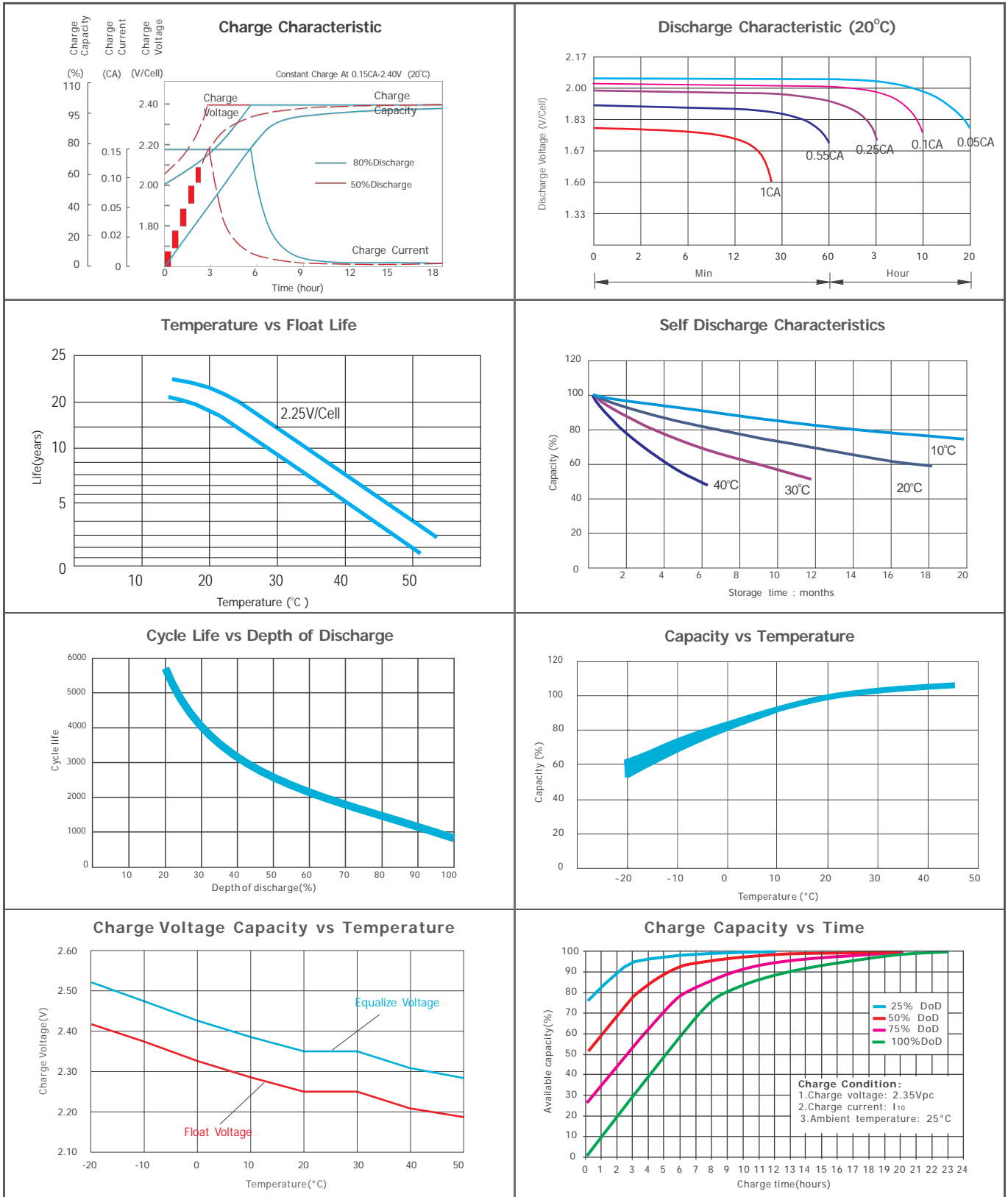
Long time discharge capacity for Solar & Wind applications

Capacity	C ₂₀ (Ah)	C ₂₄ (Ah)	C ₄₈ (Ah)	C ₇₂ (Ah)	C ₁₀₀ (Ah)	C ₁₂₀ (Ah)	C ₂₄₀ (Ah)
OPzV2-500	545	565	610	630	636	640	652
Final Voltage	1.80V		1.85V				

Solar & Wind applications parameters settings

Over voltage disconnect:	2.45±0.01V/cell @ 20~25°C
Regulation/equalize voltage:	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage:	2.25±0.005V/cell @ 20~25°C
Float voltage setting:	2.27±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:	-5mV/cell/°C

CHARACTERISTICS



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I (A)	I < 0.05C	0.05C ≤ I < 0.08C	0.08C ≤ I < 0.2C	0.2C ≤ I < 0.6C	0.6C ≤ I < 1.0C	1C ≤ I ≤ 2C
Final of Voltage	≥1.90 Vpc	≥1.85 Vpc	≥1.80 Vpc	≥1.75 Vpc	≥1.7 Vpc	≥1.6 Vpc