





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.

2 V voltage	770 Ah capacity	Tubular gel	20+ years design life
			



SPECIFICATIONS

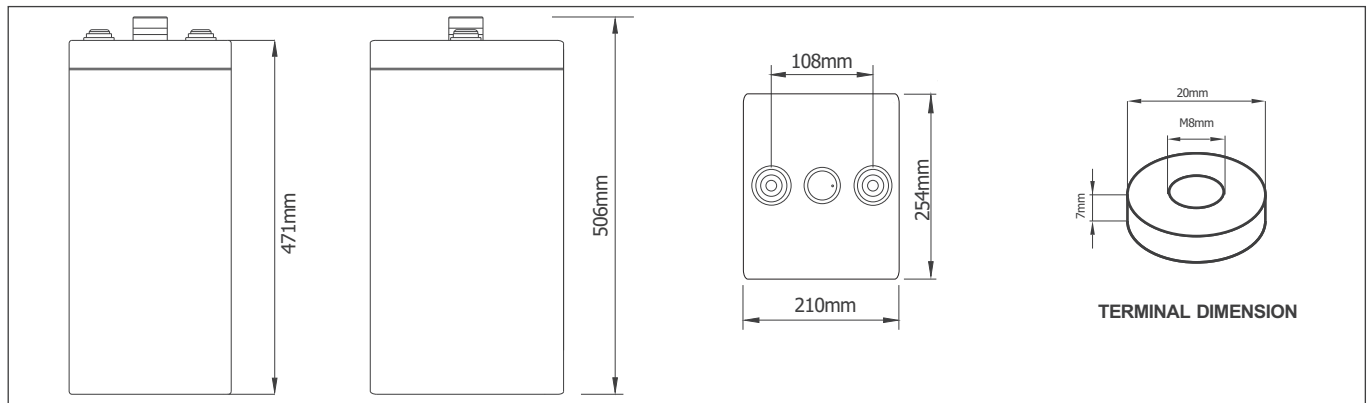
Nominal Voltage (V)	2
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	770 Ah @ C ₁₀ (to 1.80Vpc)
Dimensions	L254mm×W210mm×H506mm
Approx. Weight	54.0 kg (119.1 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.55mOhm (fully charged @ 20°C)
Max. Charge Current	154 A
Max. Discharge Current (5S)	2000 A
Short Circuit Current	3600 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
- UL1989

DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (20°C)

F.V/Tim e	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.90V	283	275	257	216	184	154	114	81.6	67.4
1.87V	385	359	318	252	205	170	124	86.6	71.2
1.85V	443	406	349	275	226	183	132	90.6	74.0
1.83V	516	452	377	303	242	193	135	93.5	75.5
1.80V	577	524	422	334	255	202	137	94.7	77.0
1.75V	612	575	495	363	266	208	140	96.3	79.3
1.70V	666	631	544	384	277	212	142	97.8	80.9
1.65V	778	711	593	408	284	216	146	99.3	82.4
1.60V	847	780	629	421	290	219	149	101	83.9

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

F.V/Tim e	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.90V	545	532	500	423	363	307	228	164	136
1.87V	729	683	610	486	401	334	246	173	143
1.85V	827	761	660	524	437	356	259	180	147
1.83V	952	838	705	572	462	372	262	184	149
1.80V	1051	958	779	622	482	386	264	184	150
1.75V	1096	1035	901	668	496	390	266	185	153
1.70V	1176	1121	976	696	509	393	268	186	155
1.65V	1349	1242	1047	731	517	396	270	187	156
1.60V	1440	1336	1090	741	520	397	273	188	157

PARAMETERS FOR SOLAR & WIND APPLICATIONS

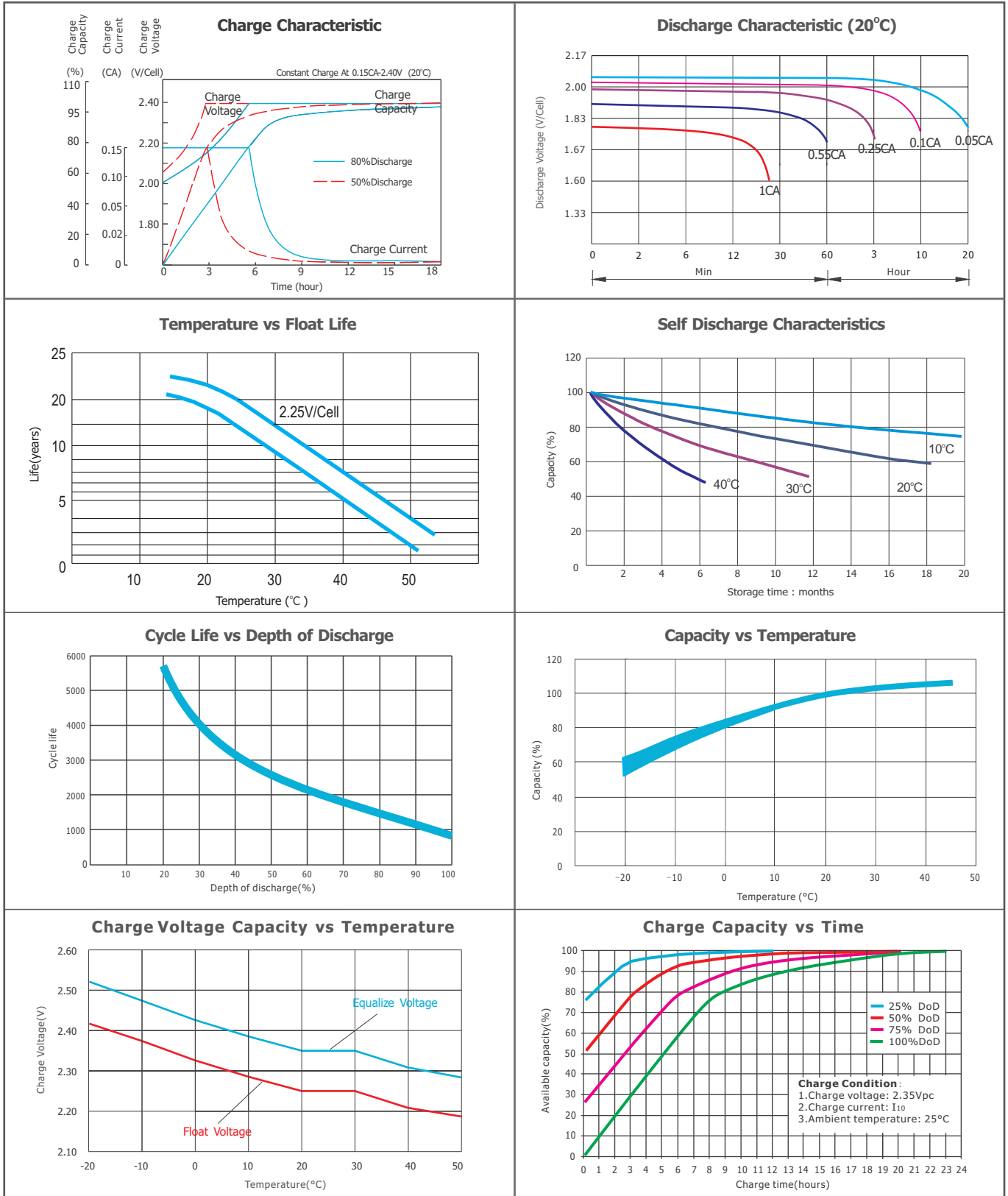
Long time discharge capacity for Solar & Wind applications

Capacity	C20 (Ah)	C24 (Ah)	C48 (Ah)	C72 (Ah)	C100 (Ah)	C120 (Ah)	C240 (Ah)
OPzV2-770	834	870	939	968	975	987	1004
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

HEADQUARTERS AND SUBSIDIARIES:

BSB Power Company Limited (HQ)
BSB Power Europe (France)

BSB Power Malaysia Sdn. Bhd
PT. BSB Indonesia

BSB Power (Thailand) Co., Ltd
BSB Power Company Pakistan Ltd