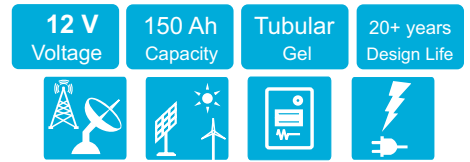


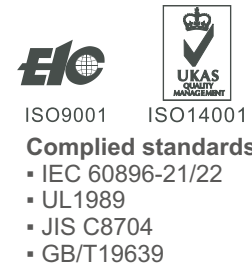
12V TUBULAR GELSERIES VRLA BATTERY

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.

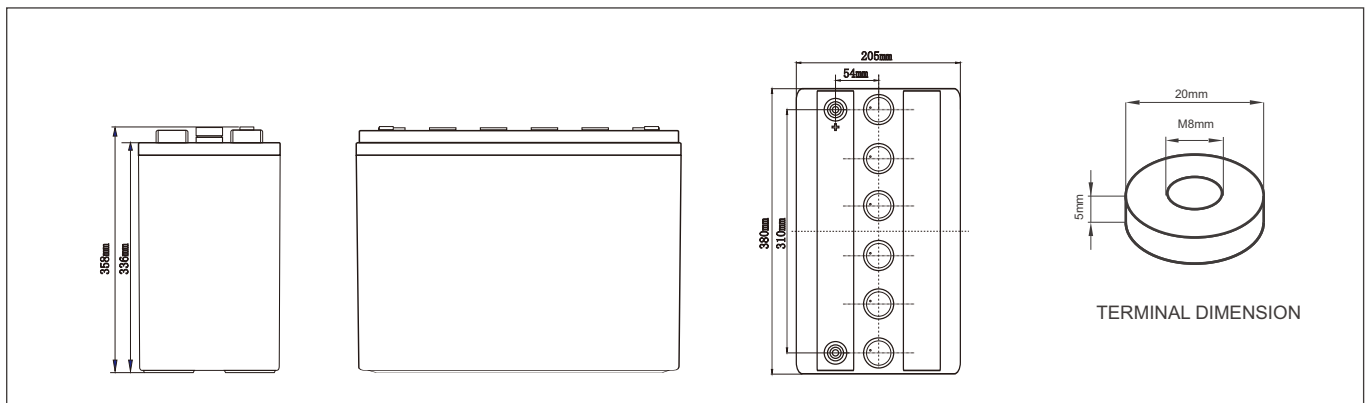


SPECIFICATIONS

Nominal Voltage (V)	12
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	150 Ah @ C ₁₀ (to 1.80Vpc)
Dimensions	L380mm×W205mm×H336mm
Approx. Weight	70.5kg (155.43 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 6.85mOhm (fully charged @ 20°C)
Max. Charge Current	30 A
Max. Discharge Current (5S)	750 A
Short Circuit Current	1300 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)	13.50-13.75V (-3mV / C/ cell)
Equalize Charge Voltage (20~25°C)	14.10-14.40V (-5mV / C/ cell)
Container Material	ABS(UL94-V0 optional)



DIMENSIONS



BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (20°C)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	551	535	502	42.3	35.8	30.0	22.2	16.0	13.2
1.87V	753	702	618	49.2	40.0	33.1	24.1	16.9	13.6
1.85V	858	788	68.3	536	44.1	35.5	25.6	17.7	14.4
1.83V	101	883	735	588	47.0	37.6	26.2	18.2	14.7
1.80V	112	102	826	646	49.7	39.4	26.8	18.5	15.0
1.75V	119	112	967	708	51.9	40.5	27.3	18.8	15.4
1.70V	129	123	106	751	538	41.3	27.8	19.1	15.7
1.65V	151	138	115	795	555	42.0	28.4	19.4	16.1
1.60V	165	152	122	816	564	42.8	28.9	19.7	16.4

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.90V	106	104	976	828	706	598	44.5	32.2	26.6
1.87V	142	133	119	946	779	652	47.9	33.7	27.8
1.85V	161	148	128	102	850	699	50.6	35.0	28.7
1.83V	186	163	137	112	901	726	51.2	35.4	29.0
1.80V	204	186	152	121	942	754	51.6	35.8	29.3
1.75V	213	201	176	130	966	76.3	52.0	36.0	29.7
1.70V	229	218	190	136	993	768	52.8	36.2	30.1
1.65V	263	242	204	142	100	772	53.3	36.4	30.3
1.60V	280	259	212	145	102	777	53.6	36.7	30.6

PARAMETERS FOR SOLAR & WIND APPLICATIONS

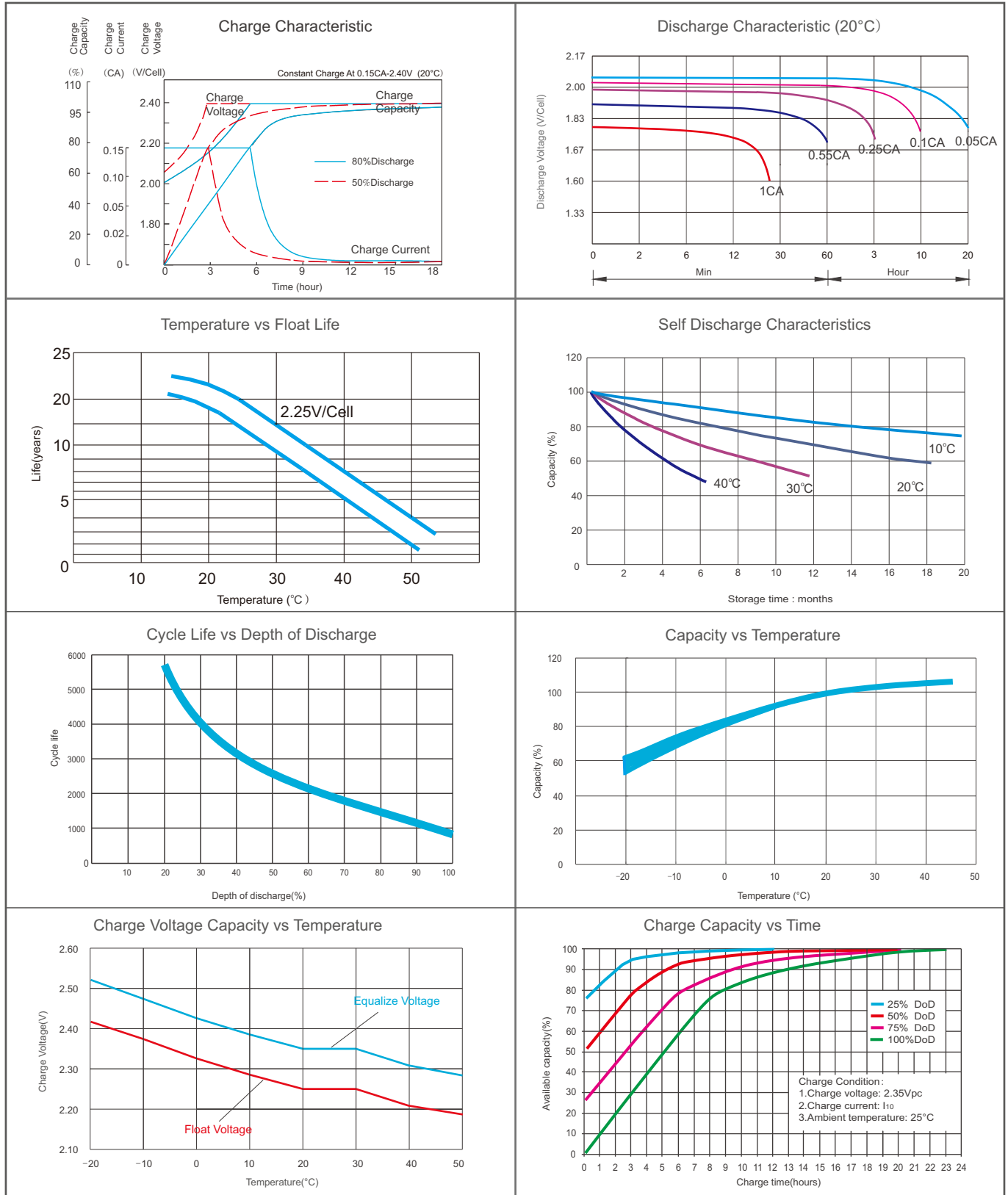
Long time discharge capacity for Solar & Wind applications

Capacity	C ₂₀ (Ah)	C ₂₄ (Ah)	C ₄₈ (Ah)	C ₇₂ (Ah)	C ₁₀₀ (Ah)	C ₁₂₀ (Ah)	C ₂₄₀ (Ah)
OPzV12-150	163	170	183	189	192	194	199
Final Voltage	1.80V						

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