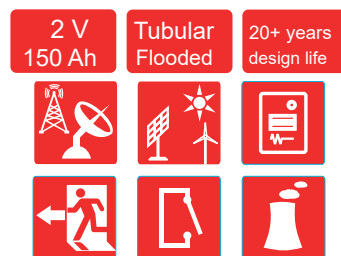


2V TUBULAR FLOODED SERIES BATTERY

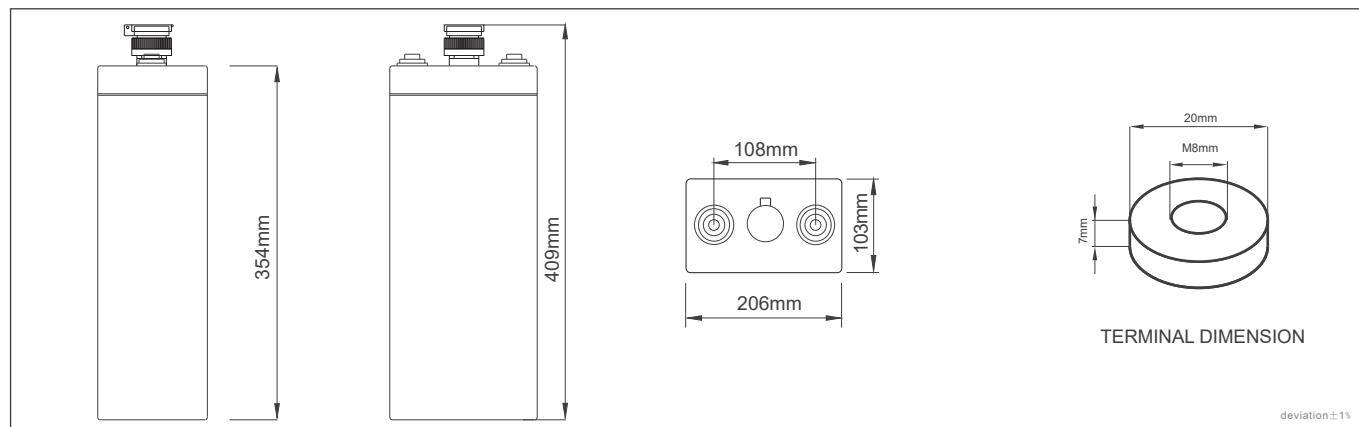
The ReFortis OPzS series is a traditional tubular plate flooded battery which offers 20+ years design life according to the standard IEC60896-11. With a new design and technical improvement, it offers maximum efficiency and reliability for the widest variety of applications. This series is highly suited for all standby power applications that require the highest levels and security of reliability

TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	2
Designed Floating Life (20°C)	20+ Years
Nominal Capacity (20°C)	150 Ah @ C ₁₀ (to 1.80Vpc)
Dimensions	L103mm×W206mm×H409mm
Approx. Weight	Without electrolyte: 10.5Kg(23.2lbs) With electrolyte: 14.5Kg (32.0 lbs)
Electrolyte	Diluted sulphuric acid of 1.240 g/cm ³ (20°C) Acid weight: 4.0Kg
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.9mOhm (fully charged @ 20°C)
Max. Charge Current	30 A
Max. Discharge Current (5S)	1000 A
Short Circuit Current	2400 A
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)
Container Material	SAN



BATTERY DIMENSIONS



BATTERY DISCHARGE TABLE

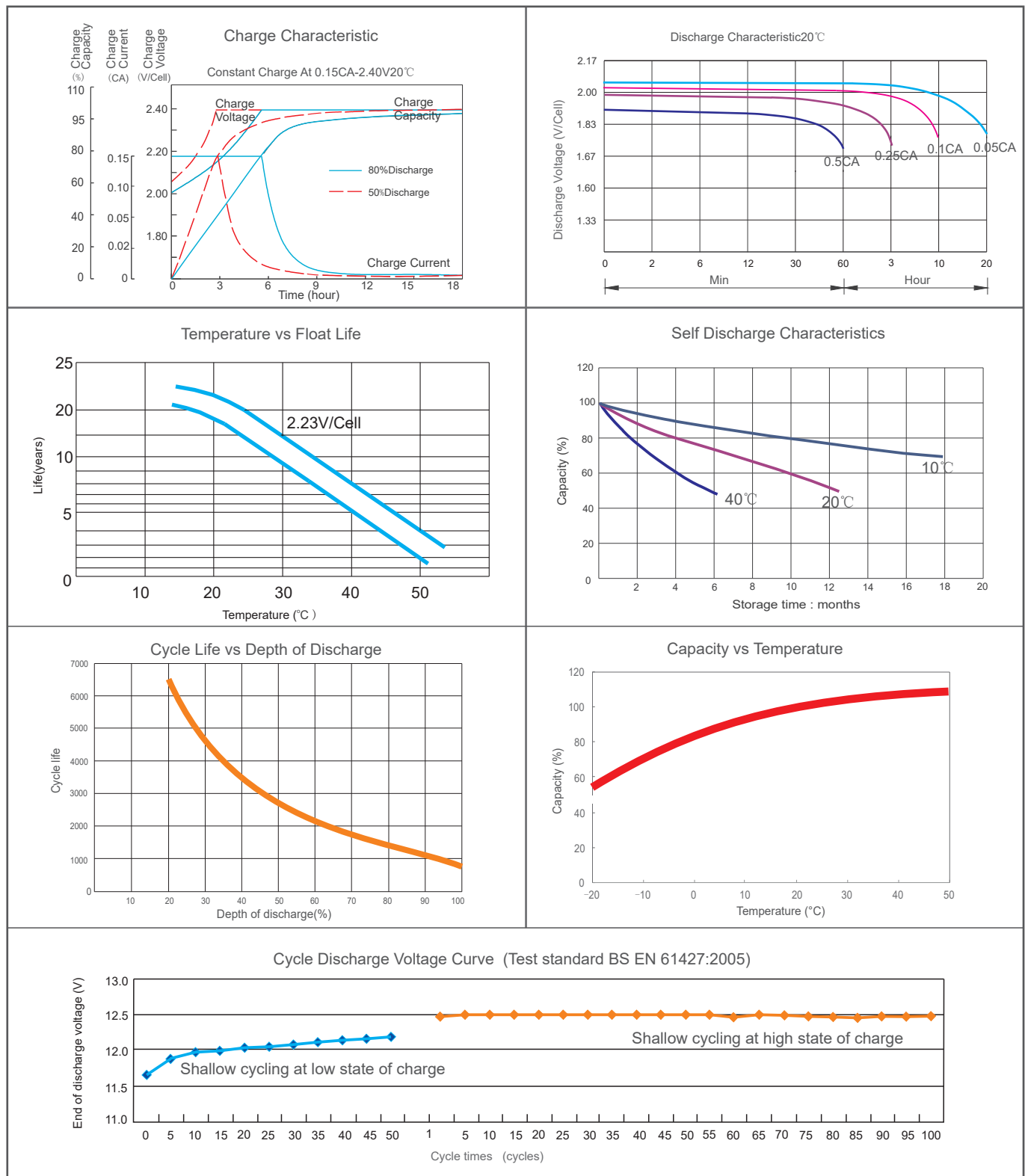
Constant Current Discharge Characteristics: Amps (20°C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h
1.90V	59.9	54.5	49.5	48.5	44.9	35.1	28.4	23.9	20.9	15.5	13.7	7.51
1.85V	64.7	62.0	60.9	60.6	51.0	38.9	31.4	26.4	24.5	16.4	14.3	7.84
1.80V	103	99.0	96.9	83.4	65.6	45.8	38.4	30.0	26.0	18.5	15.0	8.25
1.75V	124	119	115	95.4	73.1	49.5	39.8	31.2	26.7	18.8	15.5	8.66

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

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h
1.90V	116	106	94.8	91.7	86.3	75.0	61.7	52.1	44.7	32.6	28.2	15.1
1.85V	125	120	117	114	98.1	84.8	64.5	57.9	49.7	35.6	30.6	16.5
1.80V	200	192	165	152	129	103	82.1	67.1	56.7	40.1	33.0	17.1
1.75V	240	231	169	153	130	107	86.9	71.0	59.3	40.7	34.4	17.5

CHARACTERISTICS



Long time discharge capacity for Solar & Wind applications

Capacity	C ₂₄ (Ah)	C ₄₈ (Ah)	C ₇₂ (Ah)	C ₁₀₀ (Ah)	C ₁₂₀ (Ah)	C ₂₄₀ (Ah)
OPzS2-150	170	186	195	203	206	210
Final Voltage	1.85 V					

Solar & Wind applications 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 reconnection 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