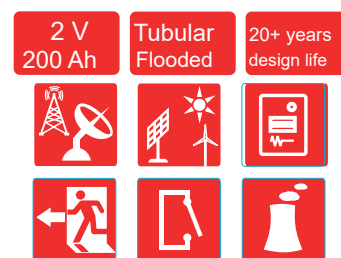


2V TUBULAR FLOODED SERIES BATTERY

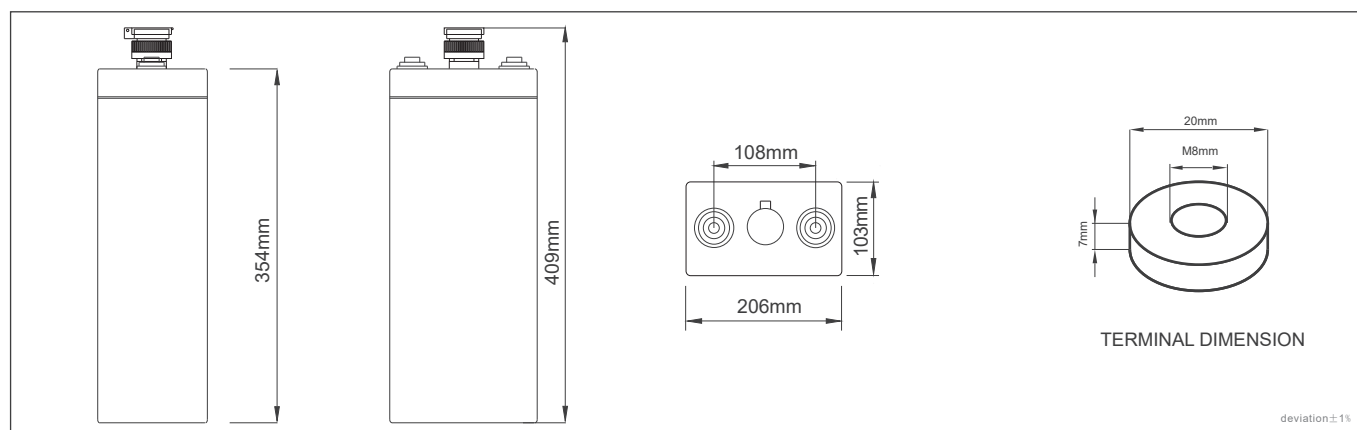
The ReFortis OPzS series is a traditional tubular plate flooded battery which offers 20+ years design life according to the standard IEC60896-11. With a new design and technical improvement, it offers maximum efficiency and reliability for the widest variety of applications. This series is highly suited 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)	200 Ah @ C ₁₀ (to 1.80Vpc)
Dimensions	L103mm×W206mm×H409mm
Approx. Weight	Without electrolyte: 13.5Kg(28.7lbs) With electrolyte: 17.5Kg (38.6 lbs)
Electrolyte	Diluted sulphuric acid of 1.240 g/cm ³ (20°C) Acid weight: 4.5Kg
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.9mOhm (fully charged @ 20°C)
Max. Charge Current	40 A
Max. Discharge Current (5S)	1000 A
Short Circuit Current	2600 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

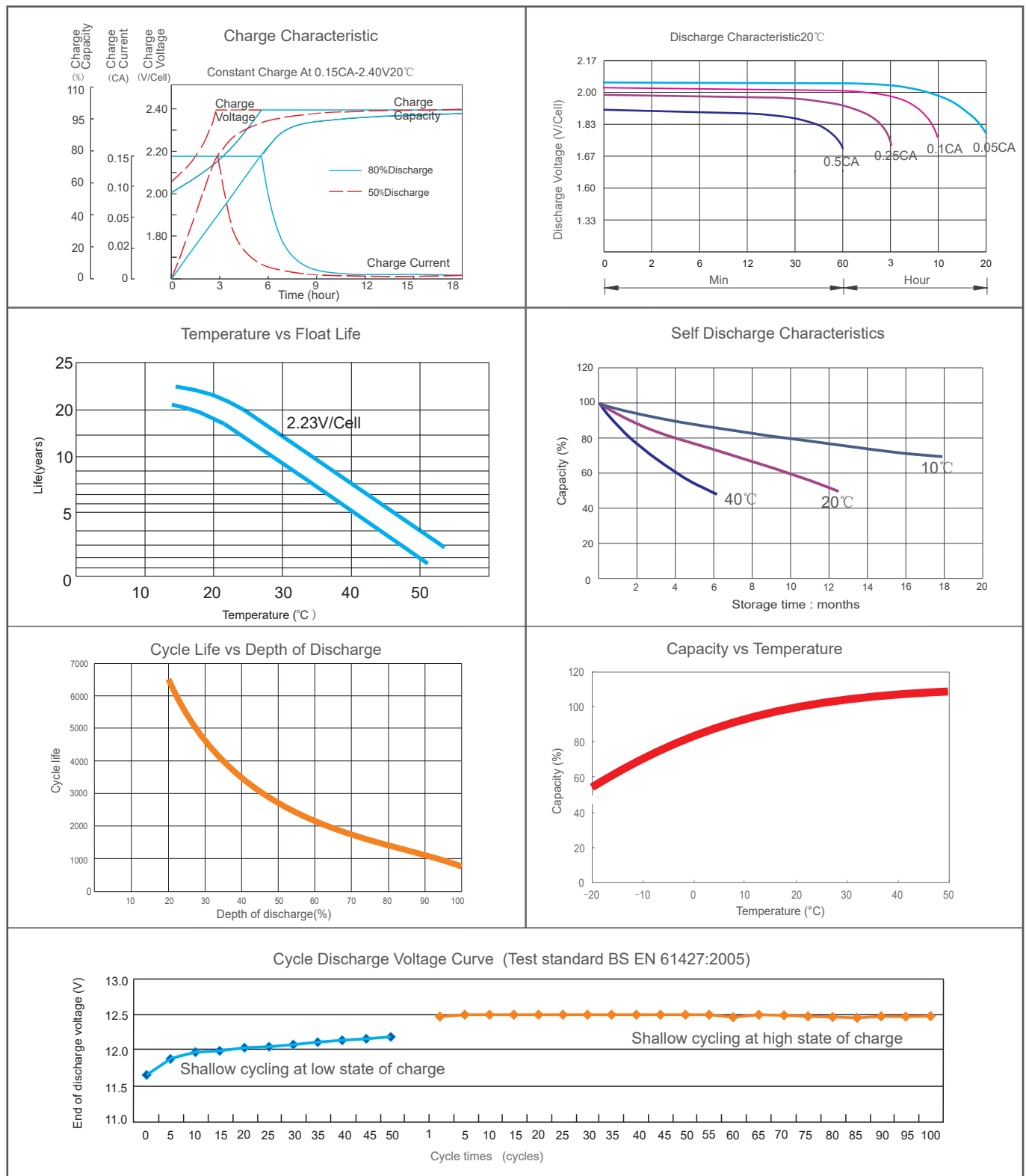
Constant Current Discharge Characteristics: Amps (20°C)

F.V./Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8 h	10 h	20h
1.90V	79.8	72.6	66.0	64.6	59.8	46.8	37.8	31.8	27.8	20.6	18.2	10.0
1.85V	86.2	82.6	81.2	80.8	68.0	51.8	41.8	35.2	32.6	21.8	19.0	10.5
1.80V	138	132	129	111	87.4	61.0	51.2	40.0	34.6	24.6	20.0	11.0
1.75V	165	158	154	127	97.4	66.0	53.0	41.6	35.6	25.0	20.6	11.6

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	155	141	126	122	115	100	82.2	69.4	59.6	43.4	37.6	20.2
1.85V	167	160	156	152	131	113	86.0	77.2	66.2	47.4	40.8	22.0
1.80V	267	256	220	203	171	137	109	89.4	75.6	53.4	44.0	22.8
1.75V	320	307	225	205	173	142	116	94.6	79.0	54.2	45.8	23.4

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)
OPzS2-200	226	248	260	270	274	280
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