

Valve Regulated Deep Cycle Battery

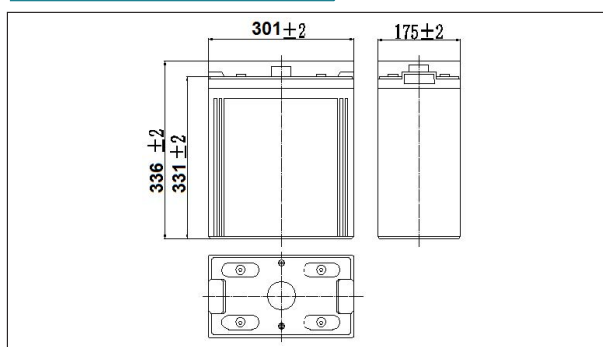
GPD600-2 2V 600AH



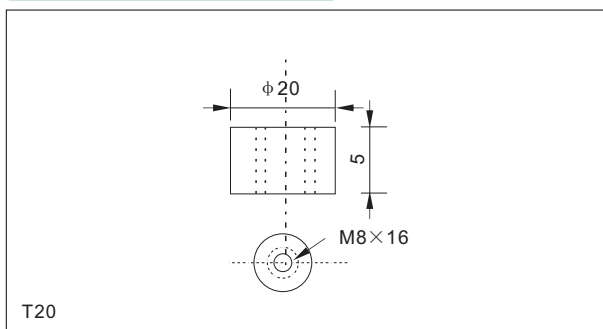
Specifications

Nominal Voltage	2V	
Rated capacity (20 hour rate)	600Ah	
Dimensions	Length	301±2mm(11.85inch)
	Width	175±2mm(6.89inch)
	Height	331±2mm(13.03inch)
	Total Height	366±2mm(14.41inch)
Approx. Weight	38kg(83.6lbs)±3%	

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	20HR(1.8V)	600Ah
	3HR(1.80V)	477Ah
	1HR(1.75V)	350Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.45m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity: 91%
	6 months	Remaining Capacity: 82%
	12 months	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage (25°C)		2.25 to 2.30V Temperature compensation: -3mV/°C
Cyclic charging voltage (25°C)		2.40 to 2.50V Temperature compensation: -5mV/°C
Maximum charging current		120A
Maximum discharge current		3600A (5 sec.)
Designed floating life (20°C)		15 years

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

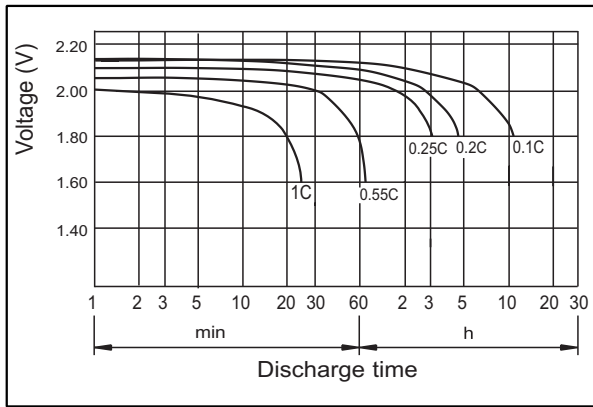
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	876	573	397	232	167	134	115	99.0	78.1	64.5	34.0
1.65V	855	562	385	231	166	133	114	98.4	77.6	64.3	33.9
1.70V	823	545	373	229	165	132	114	97.7	77.1	64.1	33.8
1.75V	795	531	361	225	164	131	113	97.0	76.5	63.8	33.6
1.80V	753	512	349	220	159	127	109	94.1	74.2	63.3	33.4

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

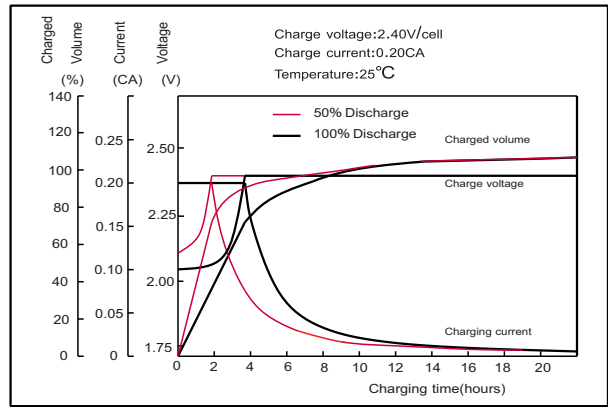
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	1603	1072	754	448	327	262	227	195	155	128	68.0
1.65V	1564	1051	731	445	326	260	225	194	154	128	67.8
1.70V	1506	1018	709	441	323	259	224	192	153	128	67.6
1.75V	1455	984	686	435	321	257	222	191	152	127	67.2
1.80V	1378	957	664	424	311	249	215	185	148	126	66.8

Note: The above characteristics data can be obtained within three charge or discharge cycles.

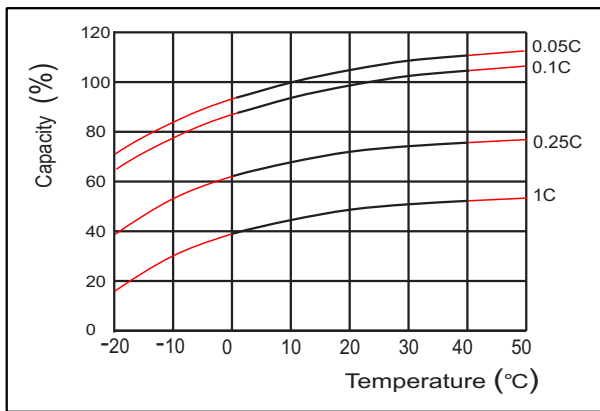
Discharge characteristics(25°C)



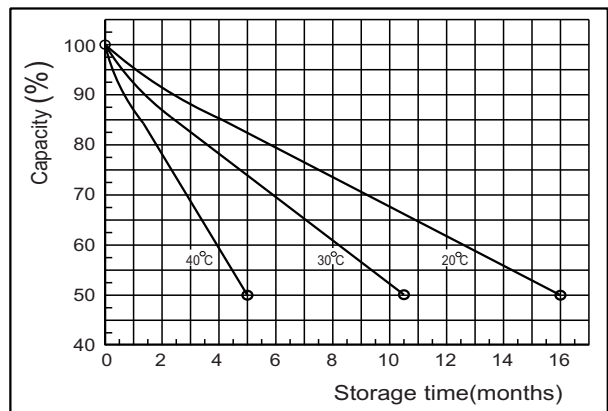
Charging characteristics



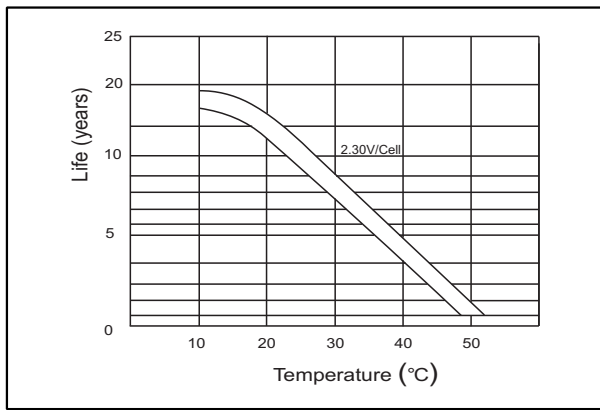
Effect of Temperature on Capacity



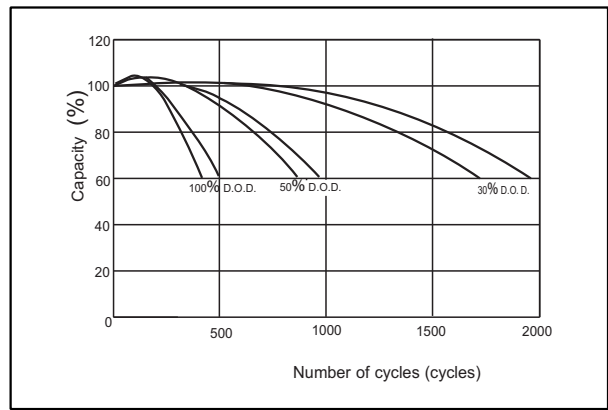
Self-discharge characteristics



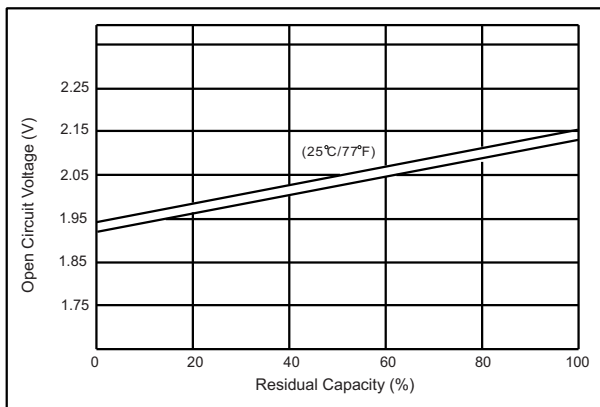
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

