

## NPD2-1000Ah 2V1000Ah

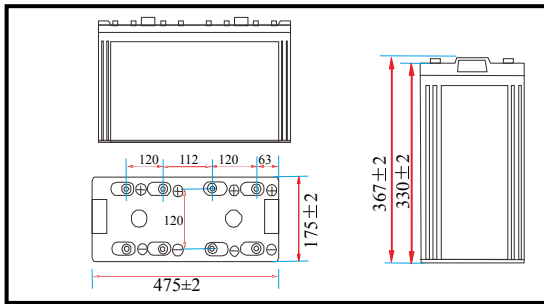
### Valve Regulated Lead Acid Battery



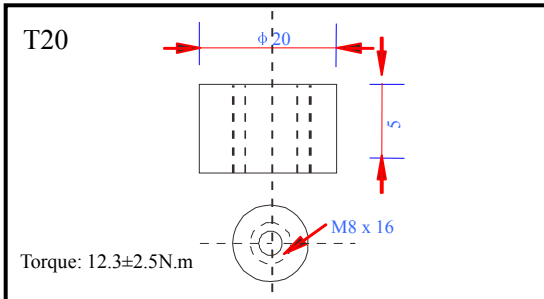
#### ● Specifications

Nominal voltage	2V (2 cells per unit)	
Rated capacity (10HR)	1000Ah/1.8V	
Dimensions	Length	475±2mm (18.70inch)
	Width	175±2mm (6.89inch)
	Height	330±2mm (12.99inch)
	Total height	367±2mm (14.45inch)
Approx. weight	63.00kg (138.90lbs)±3%	

#### ● Outer dimensions (mm)



#### ● Terminal type (mm)



#### ● Characteristics

Capacity (25°C)	10HR (1.80V)	1000Ah
	3HR (1.80V)	780Ah
	1HR (1.75V)	580Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.28mΩ
Capacity affected by temperature (10HR)	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/Block
Cyclic charging voltage (25°C)		2.40 to 2.50V Temperature compensation: -5mV/°C/Block
Maximum charging current		200A
Maximum discharge current		5500A (5 sec.)
Design life	15 years for floating (25°C)	
	Eurobat (20°C) : >12 years, very long life.	

#### ● 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: Ampere/Block (at 25°C, 77°F)

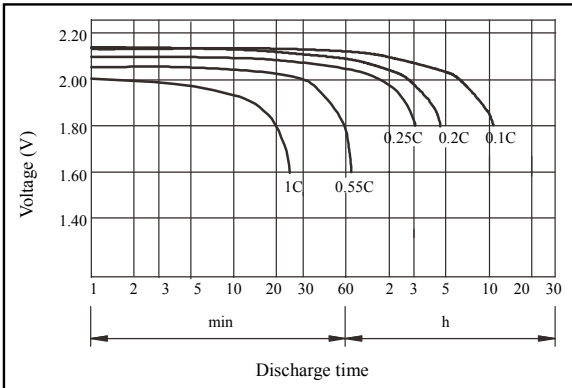
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	1460	956	662	387	278	223	192	165	130	107	56.7
1.65V/cell	1424	936	642	385	277	221	191	164	129	107	56.5
1.70V/cell	1372	908	622	381	275	220	189	163	128	107	56.4
1.75V/cell	1325	886	602	375	273	218	188	162	128	106	56.0
1.80V/cell	1255	853	582	366	265	212	182	157	124	106	55.7

#### ● Constant power discharge characteristics unit: Watt/Block (at 25°C, 77°F)

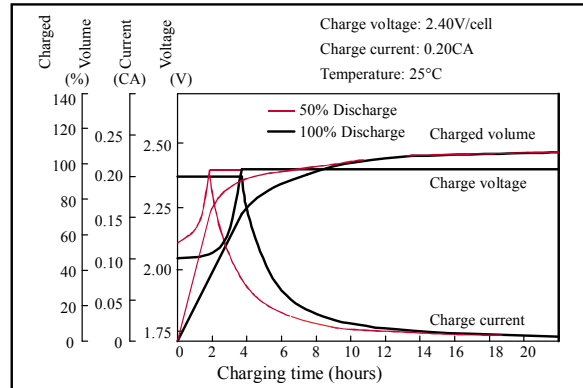
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	2671	1787	1257	747	546	437	378	325	259	214	113
1.65V/cell	2607	1751	1219	742	543	434	375	323	257	213	113
1.70V/cell	2511	1697	1181	736	539	431	373	321	256	213	113
1.75V/cell	2425	1656	1144	725	535	428	370	319	254	211	112
1.80V/cell	2297	1596	1106	706	519	415	359	309	246	210	111

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

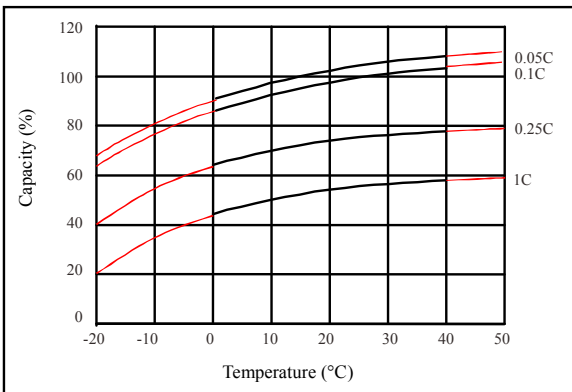
### ● Discharge characteristics (25°C)



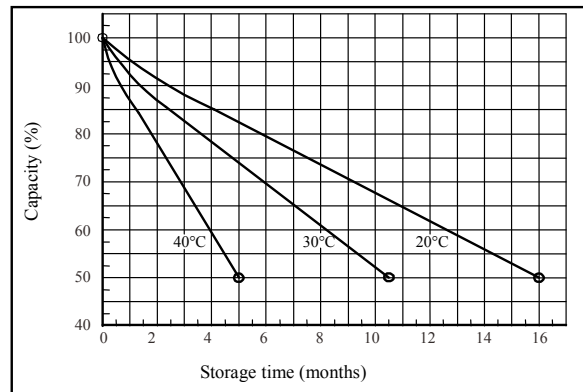
### ● Charging characteristics (25°C)



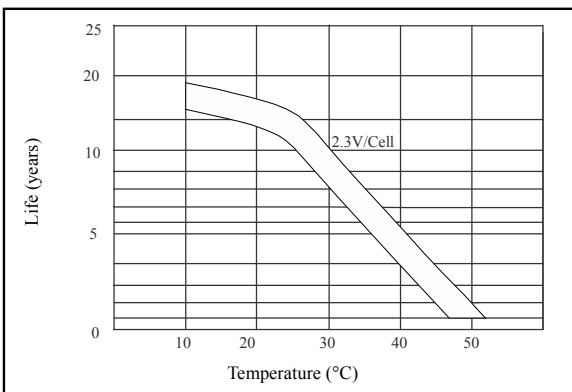
### ● Temperature effects on capacity



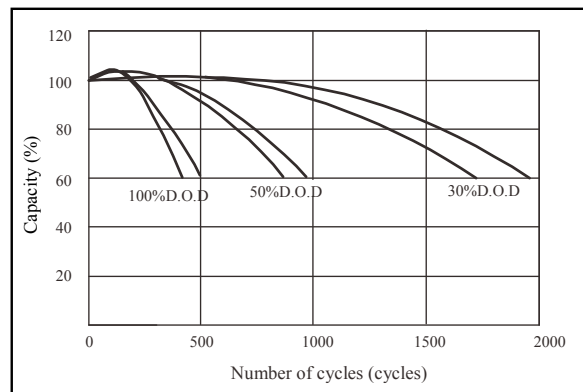
### ● Self-discharge characteristics



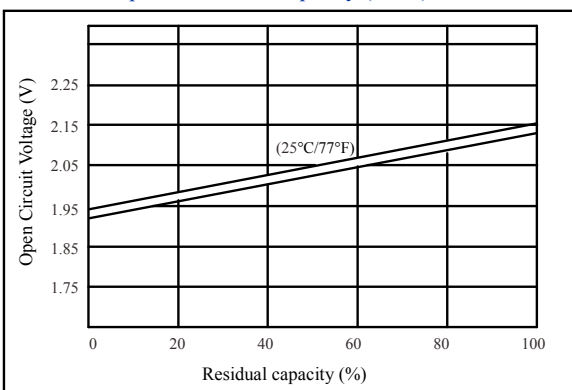
### ● Floating life on temperature



### ● Cycle life on D.O.D (25°C)



### ● Relationship for OCV and capacity (25°C)



### ● Relationship for charging voltage and temperature

