UNIVERSAL BATTERY

UB-12U120.0 (12V120.0AH)



Capacity & electrical

Capacity (25°C)	
10HR(10.8V)	**120Ah**
3HR(10.8V)	**90Ah**
1HR(10.5V)	**66Ah**
Terminal type	**T16A**
Internal resistance (Fully charged,25°C)	**Approx.4mΩ**
Maximum charging current	**36A**
Terminal material	**Copper**
Maximum discharge current	**950A(5 sec.)**
Designed floating life(20°C)	**10years**

Operating temperatures

Nominal operating temperature	**25°C±3°C (77°F±5°F)**
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)**

Charging parameters

Float charging voltage(25°C)

13.50 to 13.80V

Temperature compensation: -18mV/°C

Cyclic charging voltage(25°C)

14.50 to 15.00V

Temperature compensation: -30mV/°C

Self-discharge (25°C)

3month	**Remaining Capacity:91%**
6month	**Remaining Capacity:82%**
12month	**Remaining Capacity:65%**

Capacity affected by temperature (10HR)

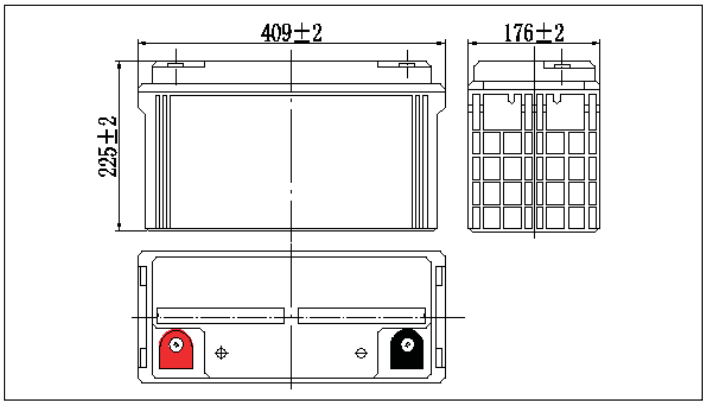
40°C	**102%**
25°C	**100%**
0°C	**85%**
-15°C	**65%**

Specifications & technical details

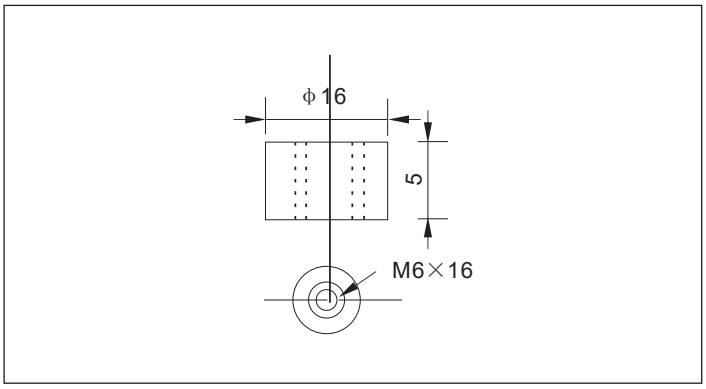
Specifications

Nominal Voltage	**12V**	Length	**409±2mm (16.10inch)**
Rated capacity (10 hour rate)	**120Ah**	Width	**176±2mm (6.93inch)**
Approx. Weight	**34.8kg (76.7lbs)±3%**	Height	**225±2mm (8.86inch)**
		Total Height	**225±2mm (8.86inch)**

Outer dimensions (mm)



Terminal Type (mm)



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	10m in	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	262	202	121	74.2	43.8	31.6	25.2	21.5	14.8	12.2	6.47
9.90V	254	197	118	73.0	43.6	31.4	25.1	21.4	14.7	12.2	6.46
10.2V	243	190	115	71.2	43.2	31.2	24.9	21.3	14.6	12.2	6.44
10.5V	233	183	112	69.0	42.6	31.0	24.7	21.1	14.5	12.1	6.40
10.8V	220	173	108	66.7	41.5	30.0	24.0	20.5	14.1	12.0	6.36

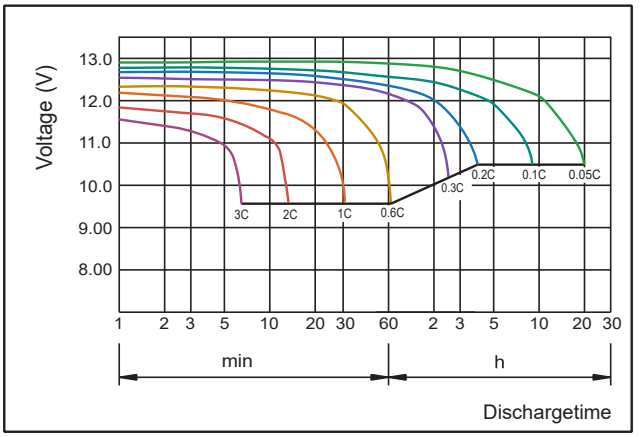
● **Constant Power Discharge Characteristics Unit:W(25°C,77°F)**

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2825	2214	1353	845	508	371	297	255	176	146	77.7
9.90V	2741	2160	1326	833	505	369	295	253	175	146	77.5
10.2V	2628	2081	1285	812	500	367	293	251	174	145	77.3
10.5V	2514	2010	1254	786	493	364	291	250	172	144	76.9
10.8V	2373	1904	1208	761	408	353	282	242	167	143	76.3

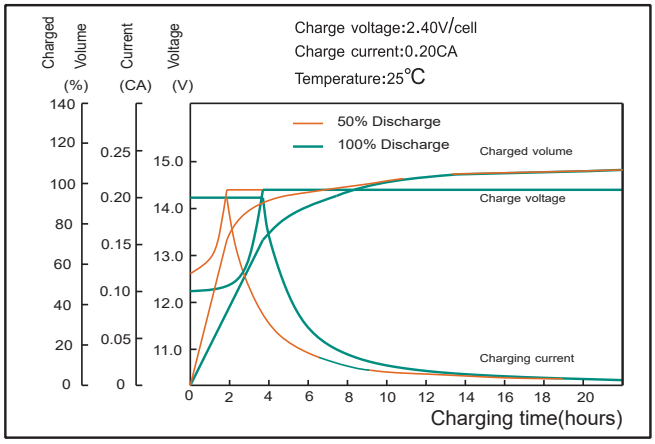
Note: The above characteristics data can be obtained within three charge or discharge cycles.

Performance characteristics

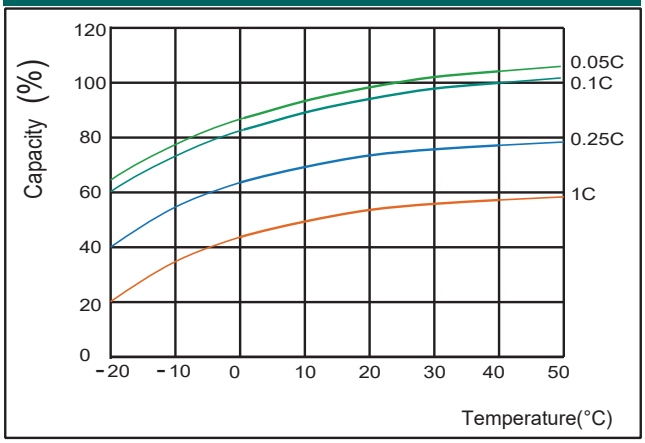
Discharge characteristics (25°C)



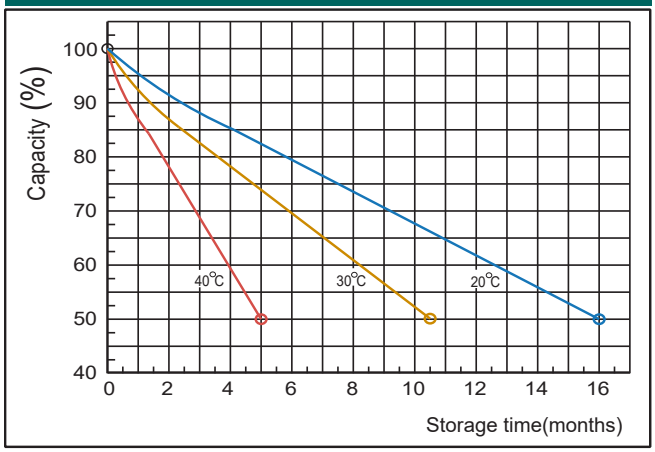
Charge characteristics (25°C)



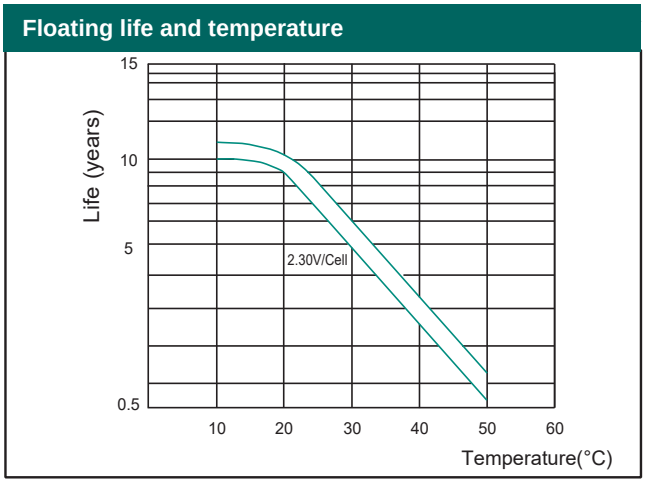
Effect of temperature on capacity



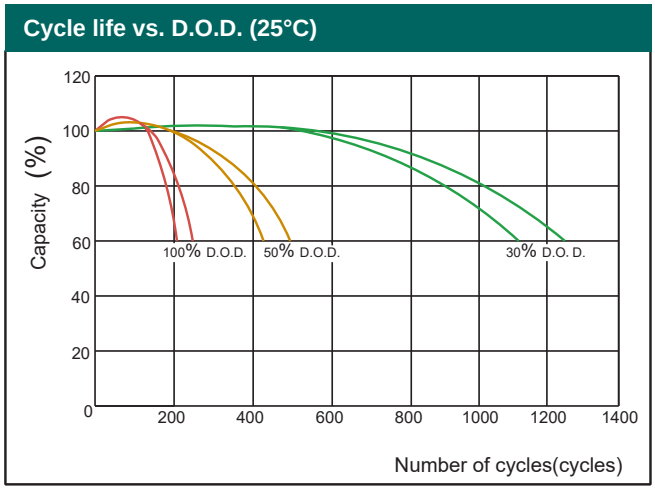
Self-discharge characteristics



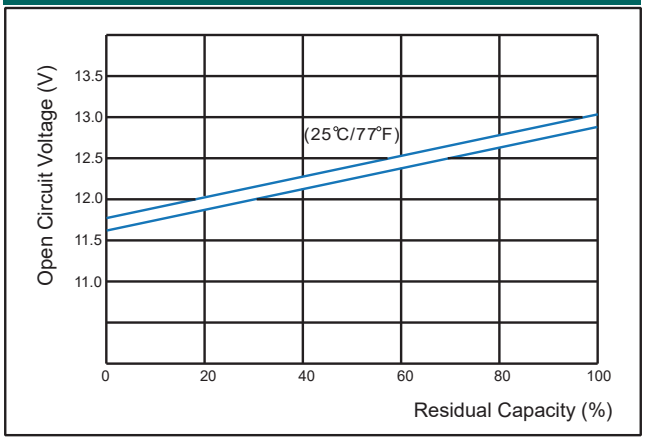
Floating life and temperature



Cycle life vs. D.O.D. (25°C)



OCV and capacity (25°C)



Charging voltage and temperature

