UNIVERSAL BATTERY

UB-12U110.0 (12V110.0AH)



Capacity & electrical

Capacity (25°C)	
10HR(10.8V)	**110Ah**
3HR(10.8V)	**82.5Ah**
1HR(10.5V)	**60.5Ah**
Terminal type	**T16A**
Internal resistance (Fully charged,25°C)	**Approx.4.5mΩ**
Maximum charging current	**33A**
Maximum discharge current	**800A(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)

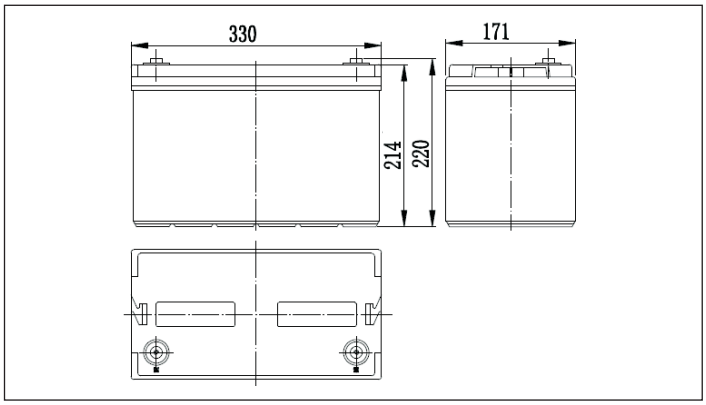
40°C	**102%**
25°C	**100%**
0°C	**85%**
-15°C	**65%**

Specifications & technical details

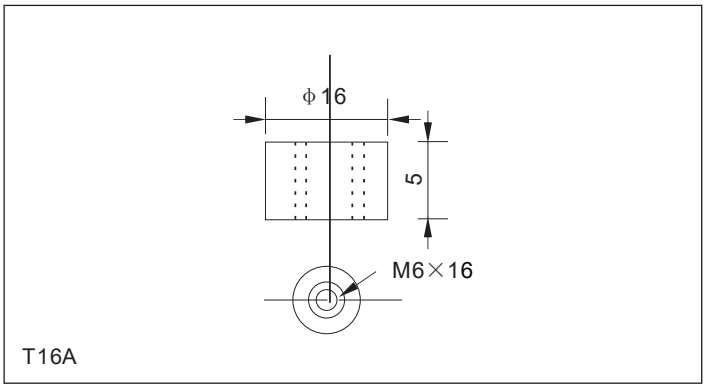
Specifications

Nominal Voltage	**12V**	Length	**330±2mm (12.99inch)**
Rated capacity (10 hour rate)	**110Ah**	Width	**171±2mm (6.73inch)**
Approx. Weight	**30.5kg (67.24lbs)±3%**	Height	**214±2mm (8.43inch)**
		Total Height	**220±2mm (8.66inch)**

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	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	231	178	107	65.5	38.7	27.9	22.2	19.1	13.0	10.8	5.72
9.90V	224	174	104	64.1	38.5	27.8	22.2	18.9	13.0	10.8	5.70
10.2V	215	167	101	62.9	38.2	27.6	21.9	18.8	12.9	10.7	5.69
10.5V	206	162	98.8	61.0	37.6	27.3	21.8	18.7	12.8	10.7	5.66
10.8V	194	153	95.1	58.9	36.7	26.5	21.2	18.1	12.4	10.6	5.62

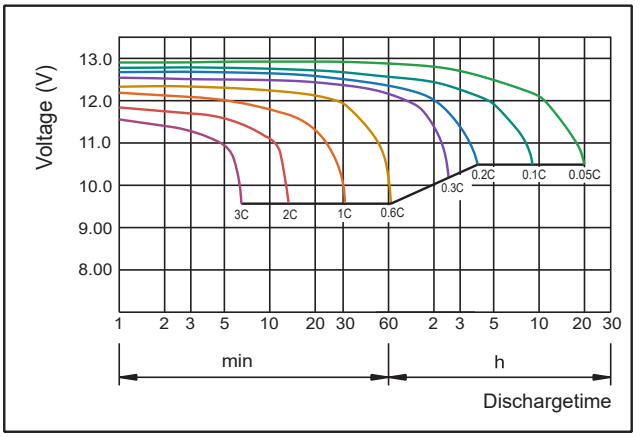
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2495	1956	1128	747	448	328	262	225	156	123	68.6
9.90V	2421	1801	1196	736	446	326	261	224	155	128	68.5
10.2V	2321	1838	1135	717	442	324	259	222	154	128	68.3
10.5V	2221	1776	1108	694	436	321	257	220	153	127	67.8
10.8V	2097	1681	1067	672	424	312	249	214	147	126	67.4

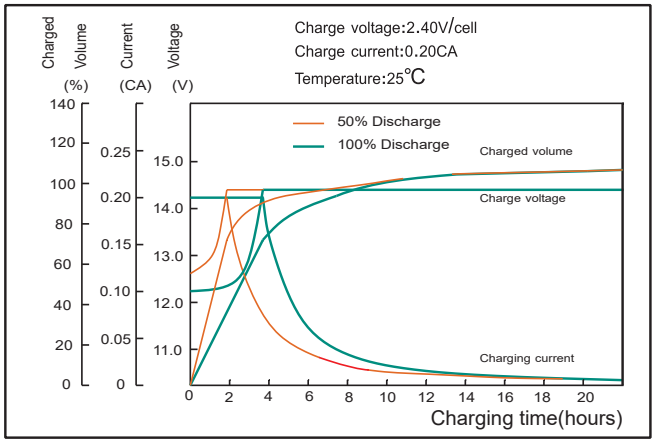
Note: The above characteristics data can be obtained within three charge or discharge cycles.

Performance characteristics

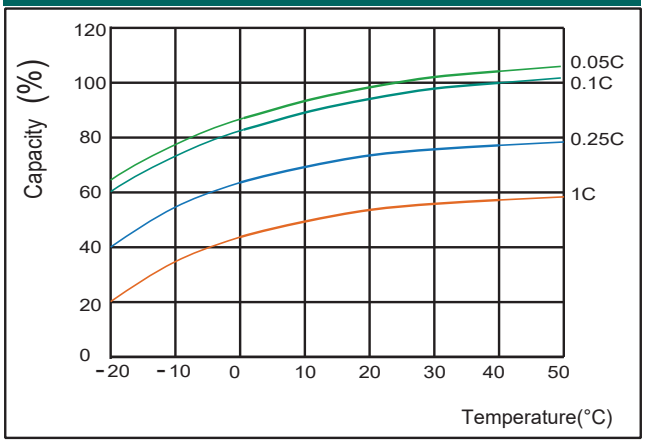
Discharge characteristics (25°C)



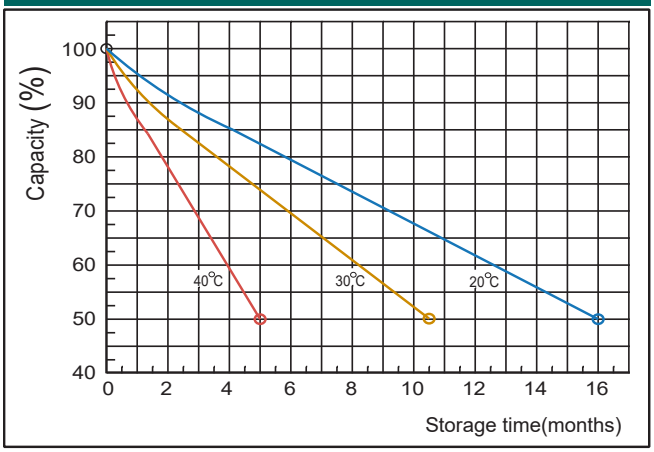
Charge characteristics (25°C)



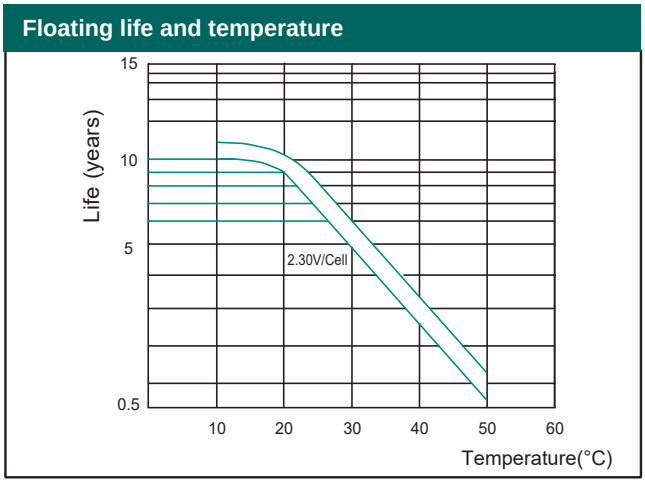
Effect of temperature on capacity



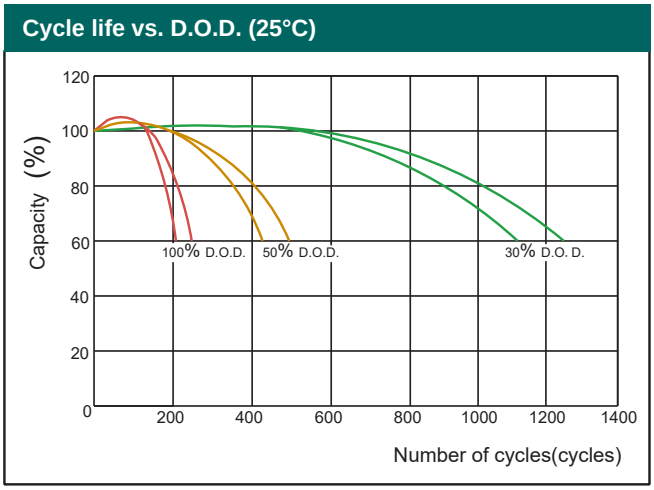
Self-discharge characteristics



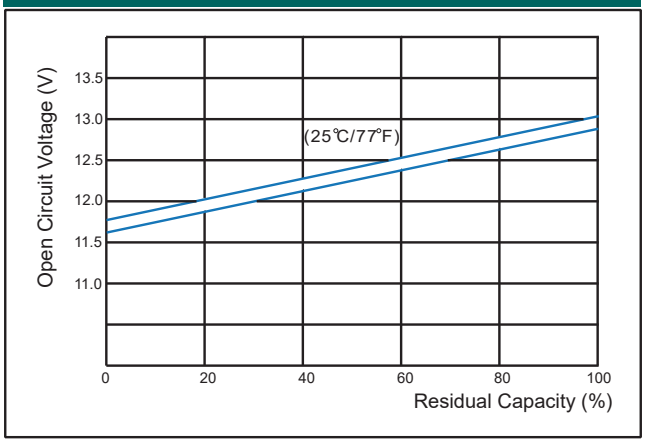
Floating life and temperature



Cycle life vs. D.O.D. (25°C)



OCV and capacity (25°C)



Charging voltage and temperature

