UNIVERSAL BATTERY

UB-12U80.0

(12V80.0AH)



Capacity & electrical

Capacity (25°C)	
10HR(10.8V)	**80Ah**
3HR(10.8V)	**60Ah**
1HR(10.5V)	**44Ah**
Terminal type	**T14**
Internal resistance (Fully charged,25°C)	**Approx.5.5mΩ**
Maximum charging current	**24A**
Maximum discharge current	**700A(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)

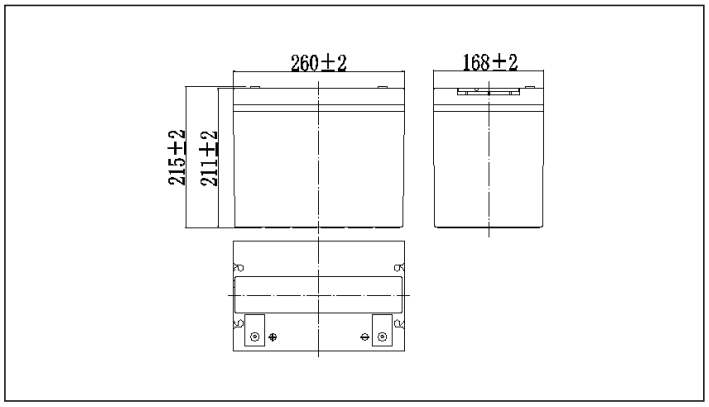
40°C	**102%**
25°C	**100%**
0°C	**85%**
-15°C	**65%**

Specifications & technical details

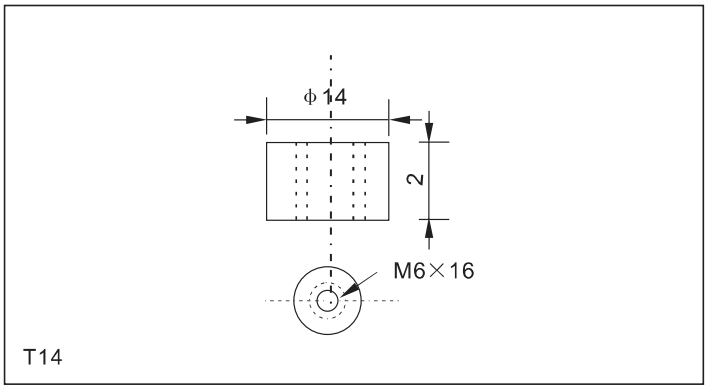
Specifications

Nominal Voltage	**12V**	Length	**260±2mm (10.24inch)**
Rated capacity (10 hour rate)	**80Ah**	Width	**168±2mm (6.61inch)**
Approx. Weight	**24.2kg (53.3lbs)±3%**	Height	**211±2mm (8.31inch)**
		Total Height	**215±2mm (8.46inch)**

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	174	134	80.4	49.4	29.2	21.1	16.8	14.4	9.87	8.14	4.32
9.90V	169	131	78.8	48.7	29.1	20.9	16.7	14.3	9.82	8.13	4.31
10.2V	162	126	76.4	47.5	28.8	20.8	16.6	14.2	9.75	8.10	4.30
10.5V	155	122	74.5	46.0	28.4	20.6	16.5	14.1	9.68	8.06	4.27
10.8V	146	116	71.8	44.5	27.6	20.0	16.0	13.7	9.39	8.00	4.24

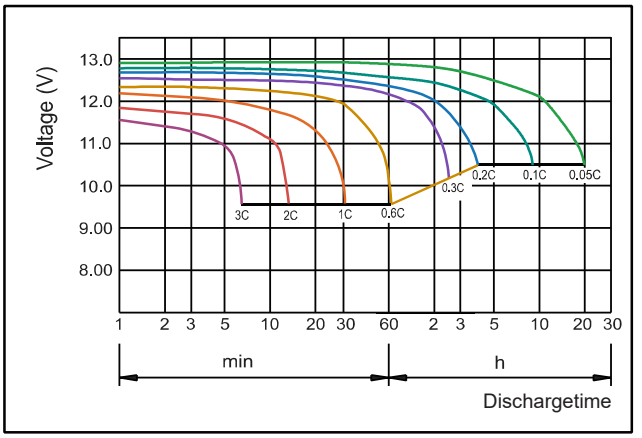
● Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1884	1476	902	564	339	248	198	170	117	97.2	51.8
9.90V	1827	1440	884	555	337	246	197	169	117	97.0	51.7
10.2V	1752	1387	857	541	334	244	195	168	116	96.8	51.5
10.5V	1676	1340	836	524	329	243	194	166	115	96.2	51.2
10.8V	1582	1269	806	507	320	235	188	161	112	95.5	50.9

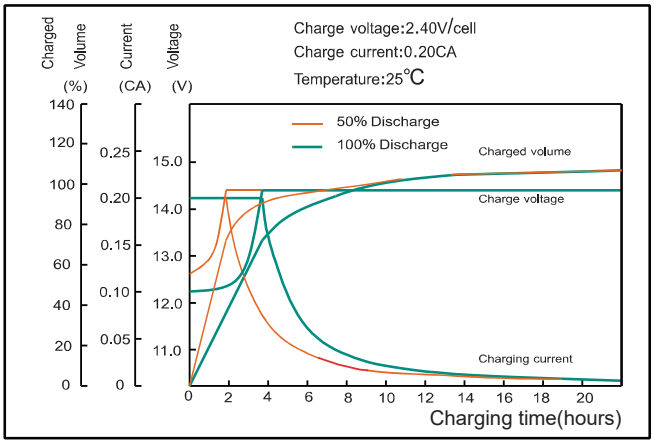
Note: The above characteristics data can be obtained within three charge or discharge cycles.

Performance characteristics

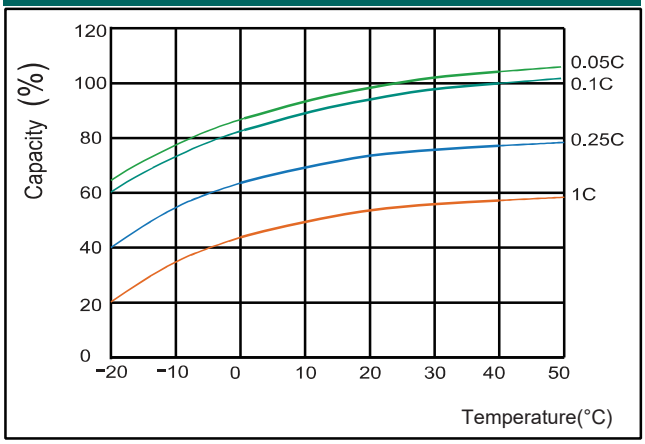
Discharge characteristics (25°C)



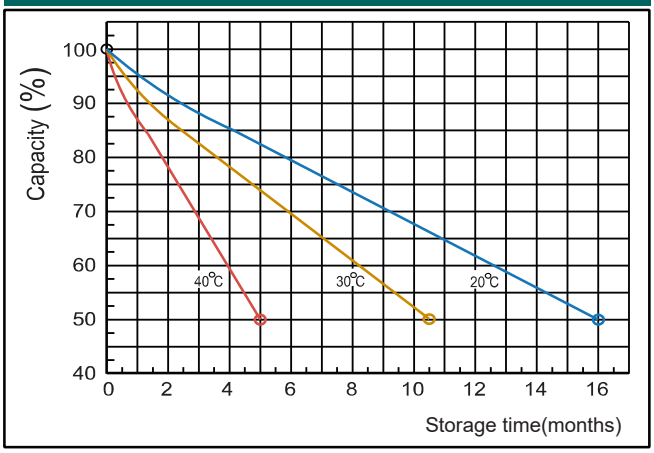
Charge characteristics (25°C)



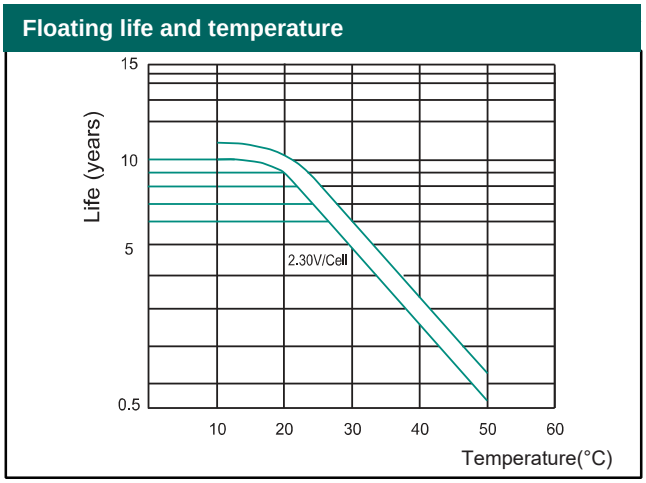
Effect of temperature on capacity



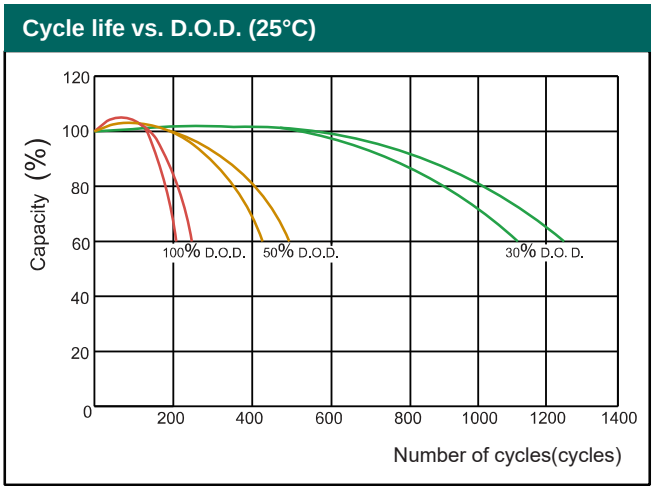
Self-discharge characteristics



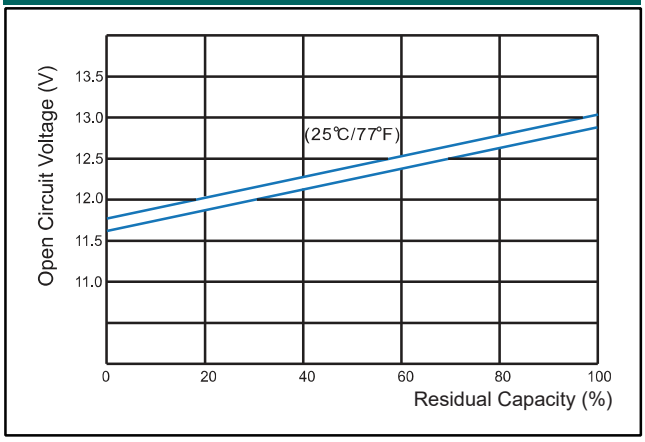
Floating life and temperature



Cycle life vs. D.O.D. (25°C)



OCV and capacity (25°C)



Charging voltage and temperature

