

UP12-230Ah

12V230Ah



Specifications

Nominal Voltage		12V
Rated capacity (10 hour rate)		230Ah
Dimensions	Length	521±2mm(20.51inch)
	Width	269±2mm(10.59inch)
	Height	220±2mm(8.66inch)
	Total Height	224±2mm(8.82inch)
Approx. Weight		69kg(152.1lbs)±3%

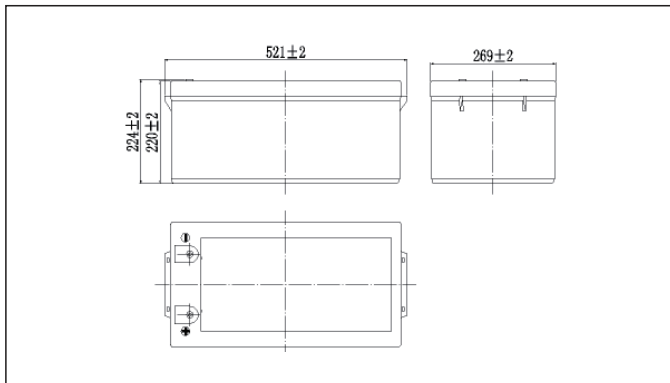
Characteristics

Capacity (25°C)	10HR(10.8V)	230Ah
	3HR(10.8V)	174Ah
	1HR(10.5V)	127Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 3.2mΩ
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)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		69A
Maximum discharge current		1400A(5 sec.)
Designed floating life(20°C)		10years

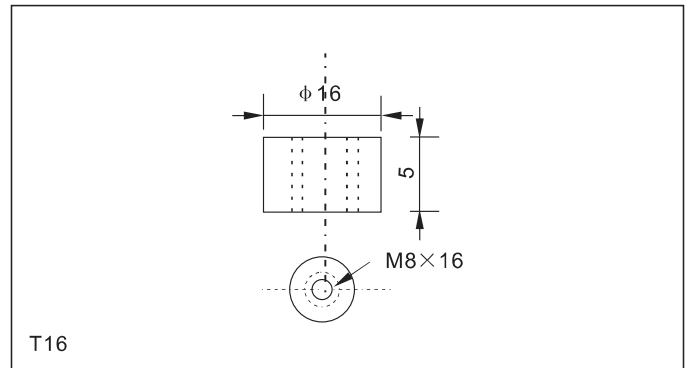
Technical details

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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	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	386	231	142	84.0	60.5	48.3	41.3	35.9	28.4	23.4	12.4
9.90V	377	227	140	83.5	60.2	48.0	41.0	35.7	28.2	23.4	12.4
10.2V	363	220	136	82.8	59.8	47.7	40.8	35.4	28.0	23.3	12.3
10.5V	351	214	132	81.6	59.3	47.4	40.5	35.2	27.8	23.2	12.3
10.8V	332	206	128	79.5	57.6	46.0	39.3	34.1	27.0	23.0	12.2

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

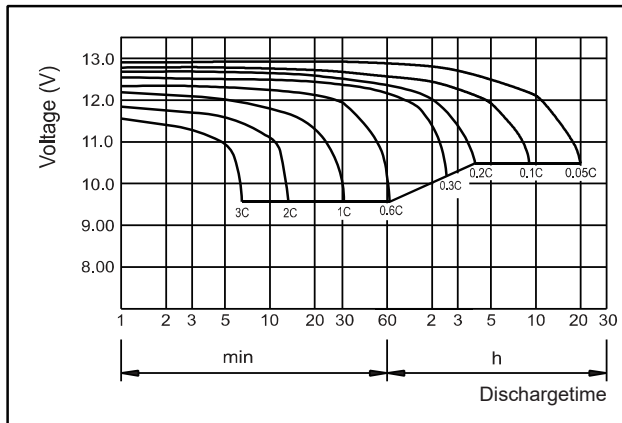
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	4243	2594	1620	973	712	568	488	424	337	280	149
9.90V	4141	2542	1596	967	708	565	485	422	335	279	149
10.2V	3988	2464	1556	959	703	561	482	419	333	278	148
10.5V	3852	2404	1507	944	698	557	478	416	331	277	147
10.8V	3649	2316	1458	920	677	540	464	403	321	275	146

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

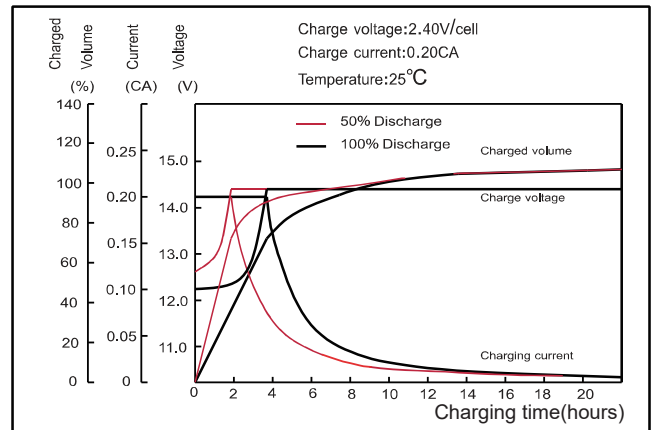
Performance curves

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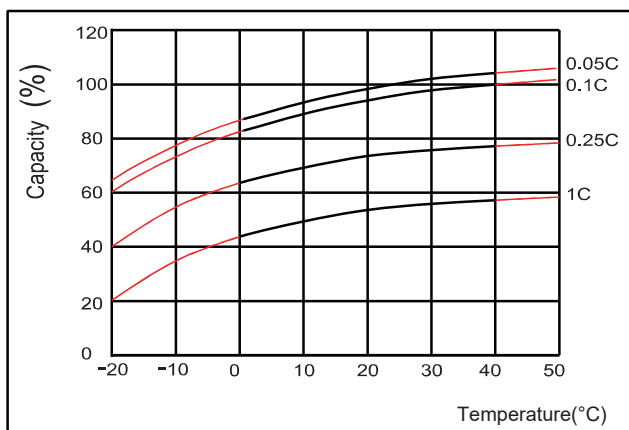
● Discharge characteristics(25°C)



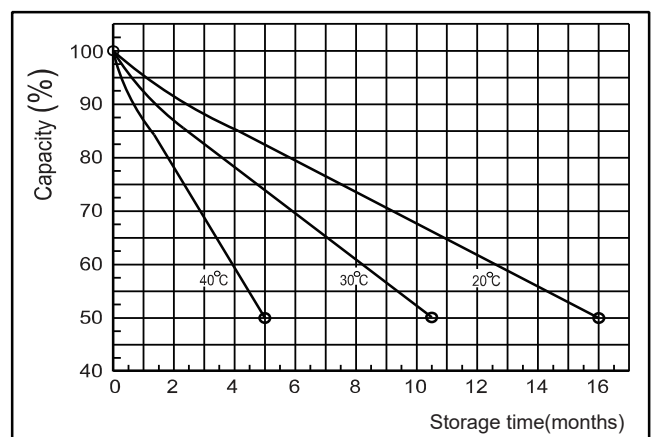
● Discharge characteristics(25°C)



● Effect of temperature on capacity



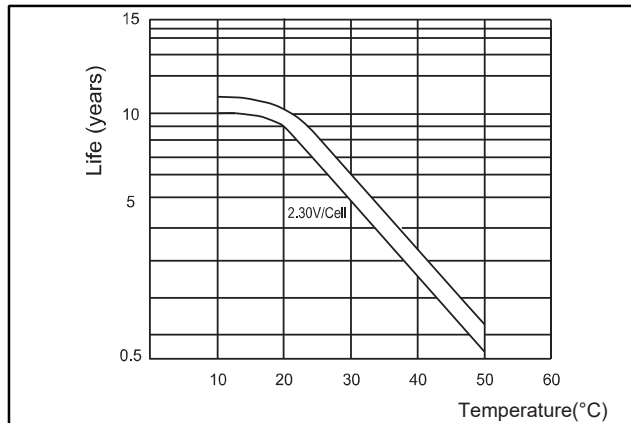
● Self-discharge characteristics



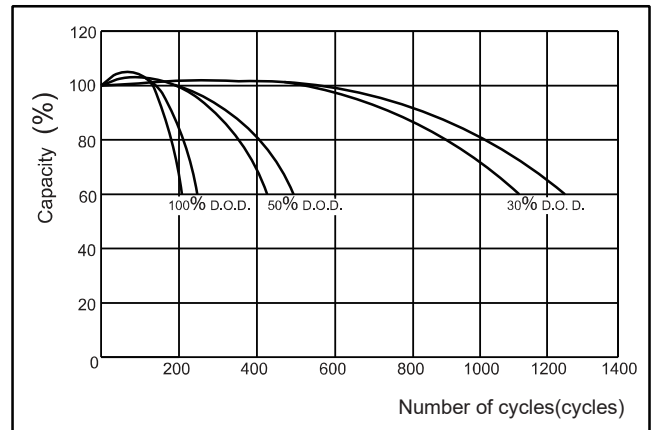
Performance curves

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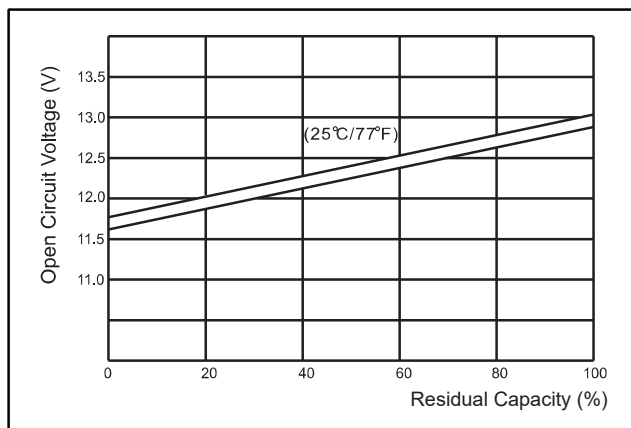
● Floating life on temperature



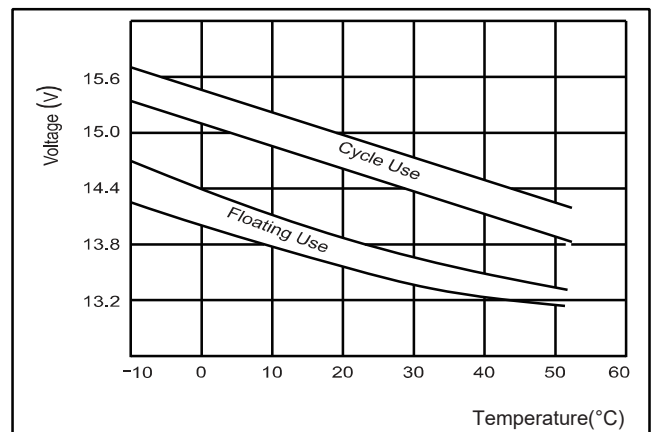
● Cycle life on D.O.D(25°C)



● The relationship for OCV and Capacity(25°C)



● The relationship for Charging voltage and Temperature



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