

UP12-50Ah

12V50Ah



Specifications

Nominal Voltage		12V
Rated capacity (10 hour rate)		50Ah
Dimensions	Length	197±2mm(7.76inch)
	Width	165±2mm(6.50inch)
	Height	170±2mm(6.69inch)
	Total Height	170±2mm(6.69inch)
Approx. Weight		14.5kg(31.9lbs)±3%

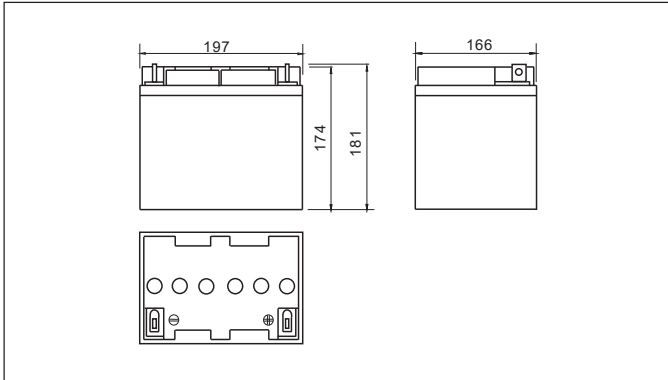
Characteristics

Capacity (25°C)	10HR(10.8V)	50Ah
	3HR(10.8V)	35Ah
	1HR(10.5V)	26Ah
Terminal type		T14
Internal resistance (Fully charged, 25°C)		Approx. 7.5m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3month	Remaining Capacity: 91%
	6month	Remaining Capacity: 82%
	12month	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		15A
Terminal material		Copper
Maximum discharge current		400A(5 sec.)
Desigend floating life(20°C)		10years

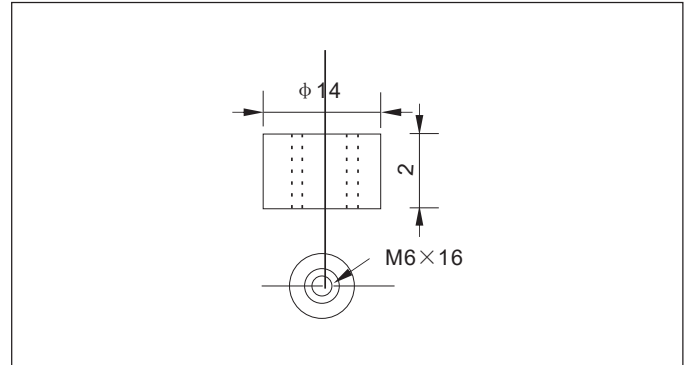
Technical details

UP12-50Ah | 12V50Ah

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	103	79.4	47.5	29.2	17.2	12.4	9.93	8.48	5.83	4.81	2.55
9.90V	99.9	77.5	46.5	28.8	17.1	12.4	9.87	8.43	5.80	4.80	2.54
10.2V	95.8	74.7	45.2	28.3	17.0	12.3	9.80	8.38	5.75	4.79	2.54
10.5V	91.7	72.0	44.0	27.2	16.8	12.2	9.73	8.32	5.72	4.76	2.52
10.8V	86.5	68.3	42.1	26.3	16.4	11.9	7.44	8.06	5.54	4.73	2.51

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

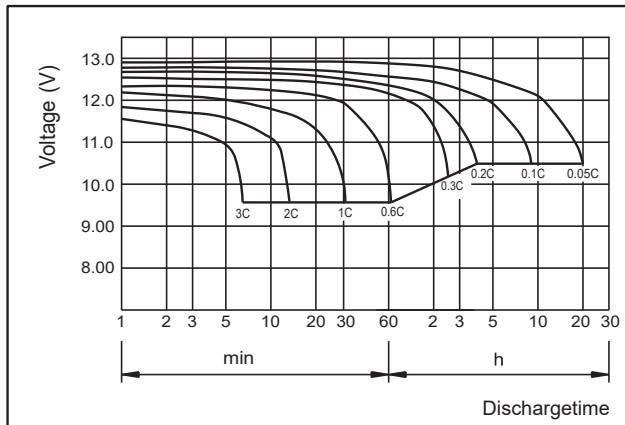
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1112	871	532	333	200	146	117	100	69.3	57.4	30.6
9.90V	1079	850	522	328	198	145	117	99.6	68.9	57.3	30.6
10.2V	1034	819	506	319	197	144	116	99.0	68.4	57.1	30.5
10.5V	990	792	494	310	194	144	114	98.3	67.9	56.8	30.2
10.8V	934	750	476	299	189	139	111	95.3	65.8	56.4	30.0

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

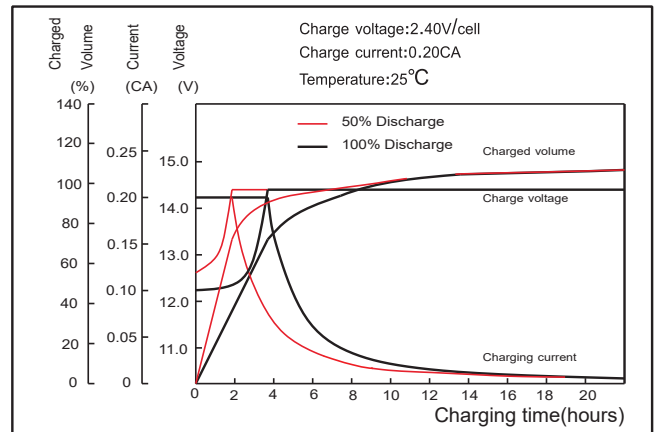
Performance curves

UP12-50Ah | 12V50Ah

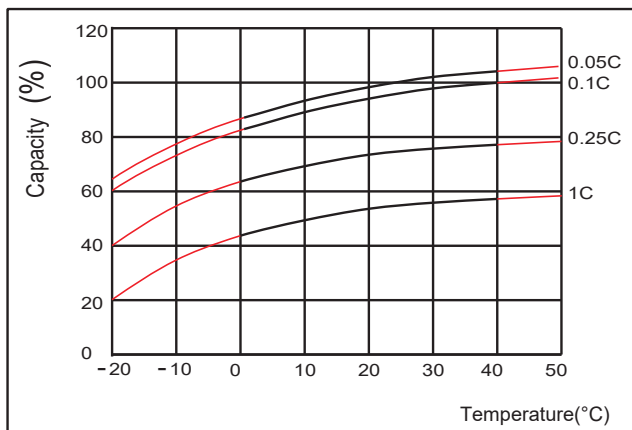
● Discharge characteristics(25°C)



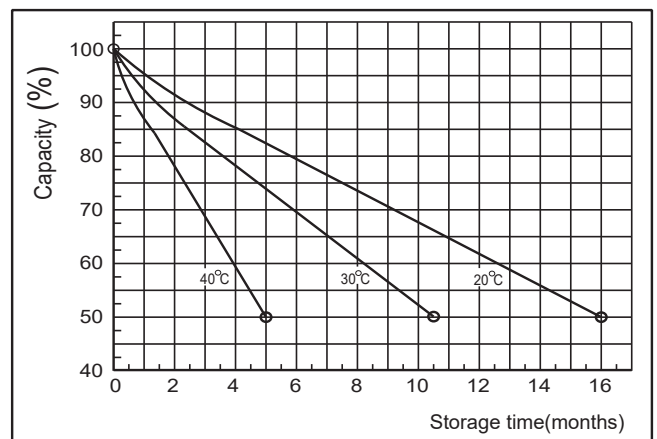
● Discharge characteristics(25°C)



● Effect of temperature on capacity



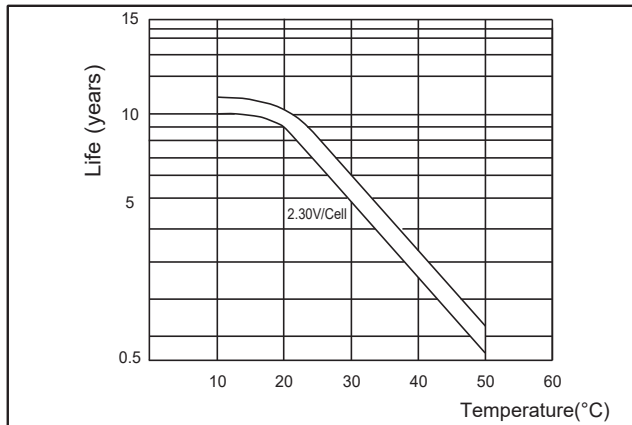
● Self-discharge characteristics



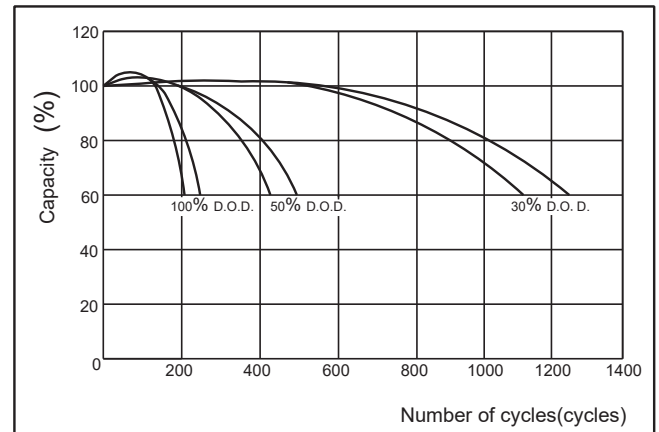
Performance curves

UP12-50Ah | 12V50Ah

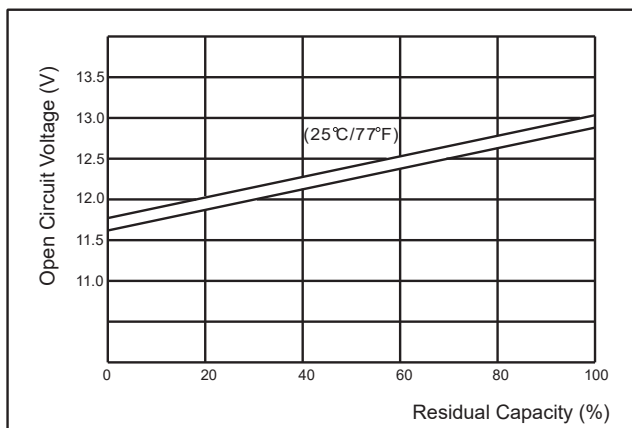
● Floating life on temperature



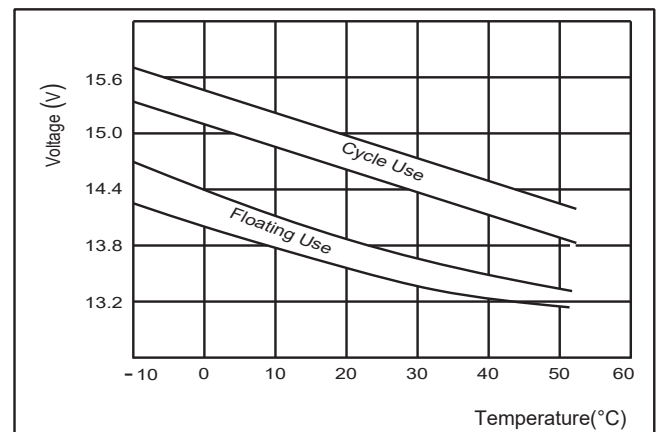
● Cycle life on D.O.D(25°C)



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



● The relationship for charging voltage and temperature



MH47211