Celltech

Leader-General Purpose

CTH100-12(12V100AH)

Specification

Code:460-6125

Nominal Voltage	12V		
Nominal Capacity(10HR)	100Ah		
Dimensions	Length	330mm	(13.0 inches)
	Width	171mm	(6.73 inches)
	Container Height	215mm	(8.46 inches)
	Total Height (with Terminal)	222mm	(8.74 inches)
Approx Weight	Approx 32.0 kg (70.6lbs)		
Terminal	M8		
Container Material	ABS		
Rated Capacity	...Ah / ...A		(20hr,10.5V,25°C/77°F)
	100Ah / 10.0A		(10hr,10.8V,25°C/77°F)
	87.5Ah / 17.5A		(5hr,10.5V,25°C/77°F)
	66.2Ah / 66.2A		(1hr,9.6V,25°C/77°F)
Max. Discharge Current	900A (5s)(**25ÁC/77ÁF**)		
Internal Resistance	Fully charged battery(25ÁC/77ÁF)Approx 5.7mΩ		
Operating Temp.Range	Discharge : -20～60°C (-4～140°F)		
	Charge : -10～60°C (14～140°F)		
	Storage : -20～60°C (-4～140°F)		
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Cycle Use	Initial Charging Current less than 30.0A.Voltage 14.4V~14.7V at 25°C(77°F)Temp. Coefficient -30mV/°C		
Standby Use	No limit on Initial Charging Current Voltage 13.2V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C		
Self Discharge	3% of capacity declined per month at 20ÁC(Average)		

Applications

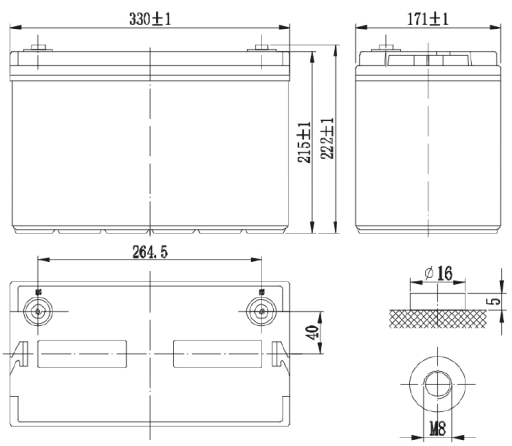
- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

VdS Intertek ETL SEMKO MH26866 ISO14001 ISO9001 CE EMC tested

Dimensions

M8 Terminal

Unit: mm



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	30min	1h	3h	5h	10h	24h
1.60V/cell	...	229	185	108	66.2	27.9	19.0	10.8	4.70
1.65V/cell	...	221	178	104	62.5	27.7	18.3	10.6	4.68
1.70V/cell	...	200	164	96.0	61.5	27.2	18.0	10.5	4.59
1.75V/cell	...	187	153	93.0	60.5	26.9	17.5	10.3	4.50
1.80V/cell	...	175	143	91.0	57.4	25.3	17.2	10.0	4.42

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V/cell	...	392	321	199	150	124	...	52.8	35.8
1.65V/cell	...	379	315	188	146	118	...	51.2	35.4
1.70V/cell	...	360	299	183	137	114	...	50.9	35.0
1.75V/cell	...	353	294	177	134	111	...	49.1	34.4
1.80V/cell	...	329	279	171	131	104	...	48.5	34.0

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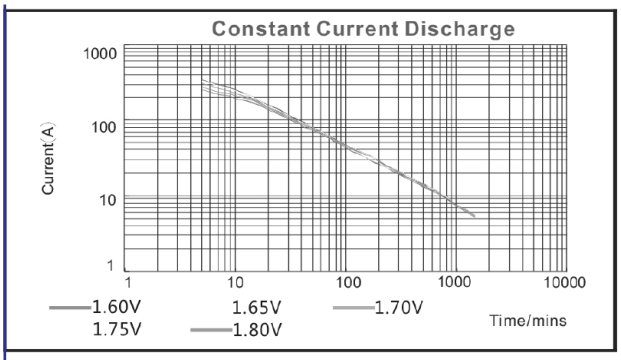
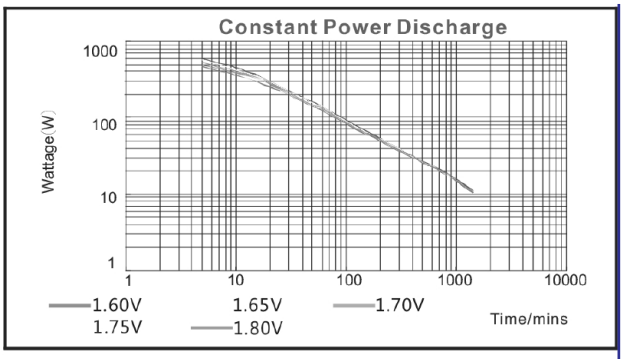
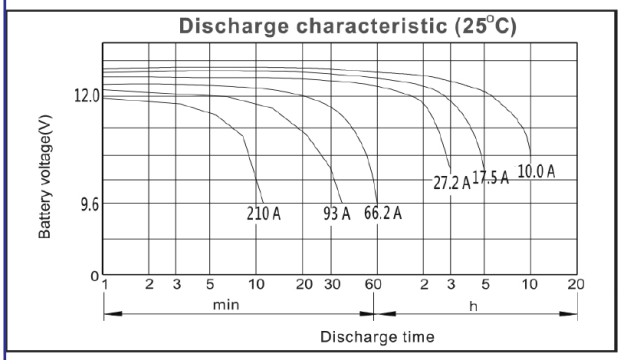
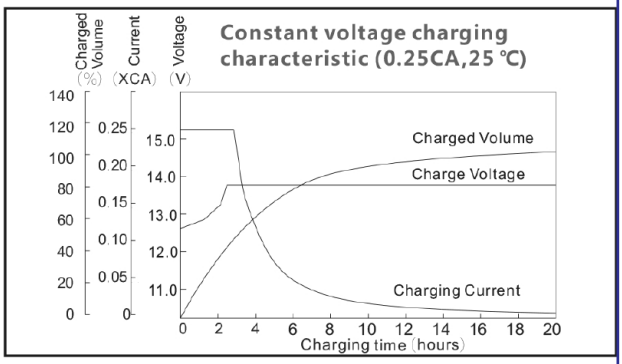
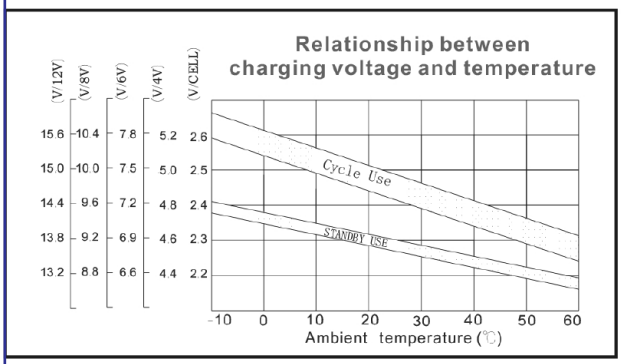
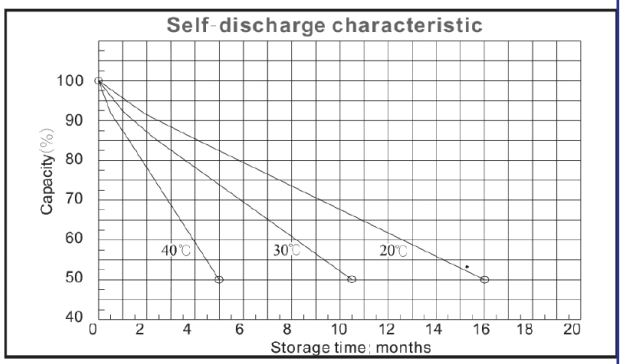

Constant Current Discharge
Current (A)
1000
100
10
1
1
10
100
1000
10000
1.60V
1.65V
1.70V
1.75V
1.80V
Time/mins

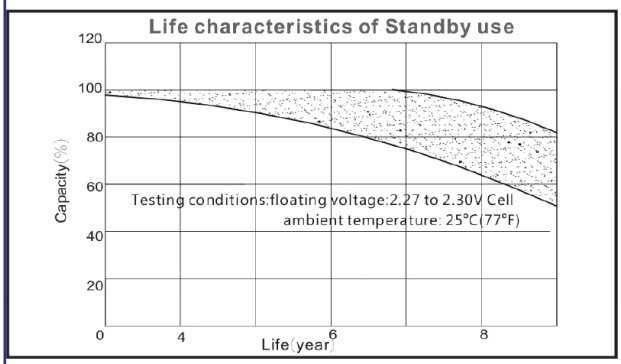

Constant Power Discharge
Wattage (W)
1000
100
10
1
1
10
100
1000
10000
1.60V
1.65V
1.70V
1.75V
1.80V
Time/mins

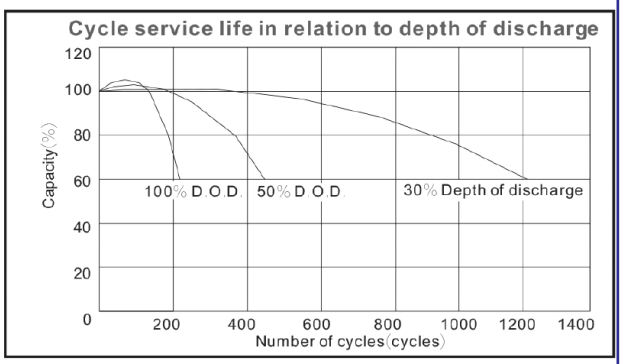

Discharge characteristic (25°C)
Battery voltage(V)
12.0
9.6
0
210 A
93 A
66.2 A
27.2 A
17.5 A
10.0 A
1
2
3
5
10
20
30
60
min
h
Discharge time

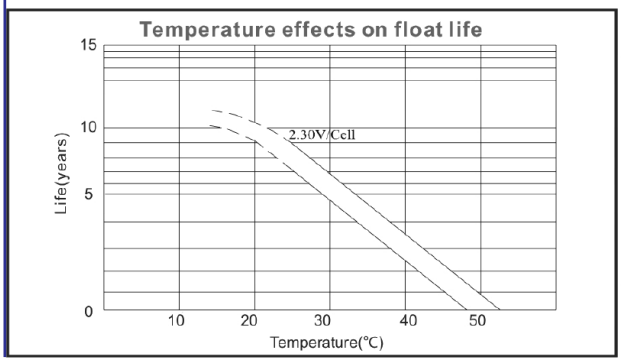

Constant voltage charging characteristic (0.25CA,25 ℃)
Charged Volume (%)
Current (XCA)
Voltage (V)
Charged Volume
Charge Voltage
Charging Current
Charging time (hours)

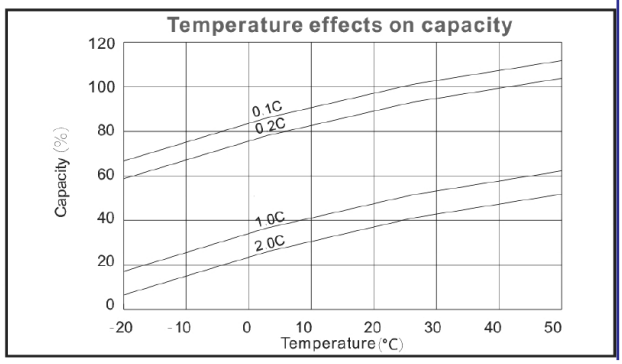

Relationship between charging voltage and temperature
(V/12V)
(V/8V)
(V/6V)
(V/4V)
(V/CELL)
Cycle Use
STANDBY USE
Ambient temperature (℃)


Self-discharge characteristic
Capacity (%)
40℃
30℃
20℃
Storage time: months


Life characteristics of Standby use
Capacity (%)
Testing conditions:floating voltage:2.27 to 2.30V Cell
ambient temperature: 25°C(77°F)
Life(year)


Cycle service life in relation to depth of discharge
Capacity (%)
100% D.O.D.
50% D.O.D.
30% Depth of discharge
Number of cycles(cycles)


Temperature effects on float life
Life(years)
2.30V/Cell
Temperature(℃)


Temperature effects on capacity
Capacity (%)
0.1C
0.2C
1.0C
2.0C
Temperature(℃)