

# CDC50-12

12V 50AH

Deep Cycle Battery



## CDC50-12



## Physical Specification

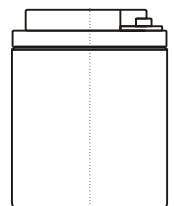
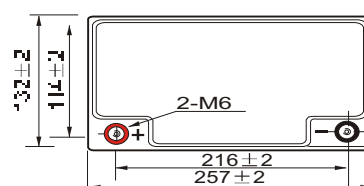
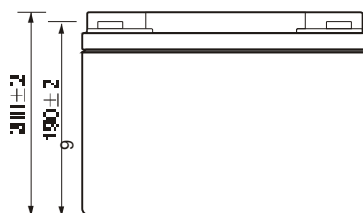
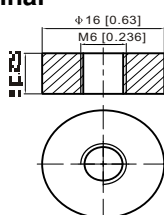
Part Number:	<b>CDC50-12</b>
Length:	<b>257 ± 2 mm (10.11 inches)</b>
Width:	<b>132 ± 2 mm (5.19 inches)</b>
Container Height:	<b>200 ± 2 mm (7.87 inches)</b>
Total Height (with terminal):	<b>200 ± 2 mm (7.87 inches)</b>
Approx Weight:	<b>Approx 17.6 Kg (38.8 lbs)</b>

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	50AH
<b>Terminal Option</b>	T6	
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
<b>Rated Capacity</b>	(20hr, 1.80V/cell, 25°C/77°F)	53.6AH/2.68A
	(10hr, 1.80V/cell, 25°C/77°F)	50.0 AH/5.50A
	(5hr, 1.75V/cell, 25°C/77°F)	43.9AH/8.77A
	(3hr, 1.75V/cell, 25°C/77°F)	39.8 AH/13.3A
	(1hr, 1.60V/cell, 25°C/77°F)	32.3AH/32.3A
<b>Max Discharge Current (5s)</b>	600 A	
<b>Internal Resistance</b>	Approx. 8.0mΩ	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -15°C~50°C (5°F~122°F) Charge: 0°C~40°C (32°F~104°F) Storage: -15°C~40°C (5°F~104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 15.0A. Voltage 14.4V~15V at 25°C (77°F) Temp. Coefficient -30mV/°C
<b>Self Discharge</b>	Self Discharge	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
	Capacity affected by Temperature	40°C (104°F)      103%
		25°C (77°F)        100%
		0°C (32°F)          86%
<b>Design Floating Life at 20°C</b>	20+ Years	
<b>Self Discharge</b>	Canbat deep cycle batteries may be stored for up to 6 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%	

## Dimensions

### T6 Terminal



To ensure safe and efficient operation always refer to the latest edition of our datasheets, as published on our website [www.canbat.com](http://www.canbat.com). Canbat Technologies Inc. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E

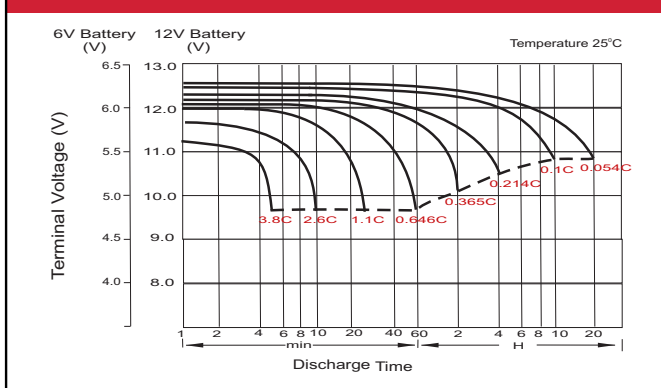
### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	73.2	61.6	53.8	38.7	30.8	25.0	15.5	12.1	9.80	7.96	6.95	5.67	4.72	2.66
1.80V/cell	93.5	74.4	63.6	45.7	35.8	28.0	16.9	13.0	10.5	8.55	7.45	6.01	5.00	2.68
1.75V/cell	102.8	81.3	68.4	47.4	37.1	29.3	17.6	13.3	10.7	8.77	7.65	6.11	5.05	2.71
1.70V/cell	112.0	86.8	71.9	49.4	38.6	30.2	18.3	13.6	11.0	8.99	7.81	6.20	5.10	2.76
1.65V/cell	120.9	92.3	76.4	52.1	39.6	31.2	18.8	14.2	11.4	9.2	7.98	6.30	5.21	2.79
1.60V/cell	131.3	98.7	81.4	55.0	41.3	32.3	19.4	14.6	11.7	9.5	8.16	6.36	5.26	2.81

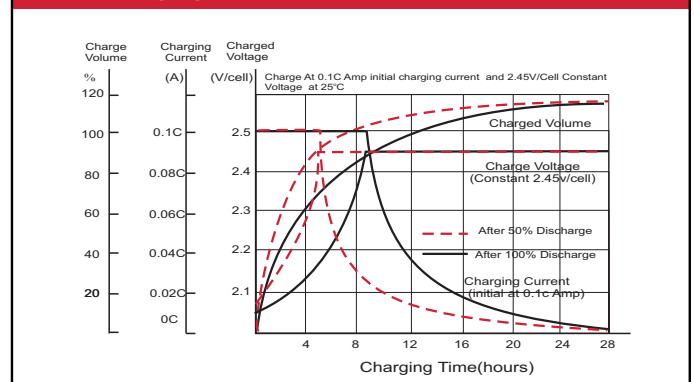
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	136.6	116.1	102.6	74.4	59.5	48.5	30.2	23.6	19.2	15.6	13.7	11.2	9.3	5.31
1.80V/cell	172.2	138.2	119.4	86.8	68.6	54.0	32.8	25.3	20.4	16.7	14.7	11.9	9.9	5.35
1.75V/cell	186.9	149.5	127.4	89.6	70.9	56.2	33.9	25.7	20.8	17.1	15.0	12.1	10.0	5.40
1.70V/cell	200.8	158.5	133.1	92.9	73.5	57.9	35.2	26.3	21.3	17.5	15.3	12.2	10.1	5.49
1.65V/cell	215.2	167.4	140.8	97.6	75.1	59.6	36.0	27.4	22.0	18.0	15.6	12.4	10.3	5.56
1.60V/cell	229.7	176.9	148.4	102.0	77.5	61.2	37.0	28.1	22.6	18.5	15.9	12.5	10.4	5.58

### Discharge Characteristics



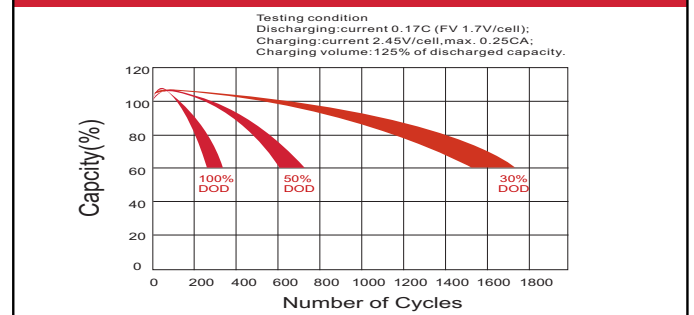
### Float Charging Characteristics



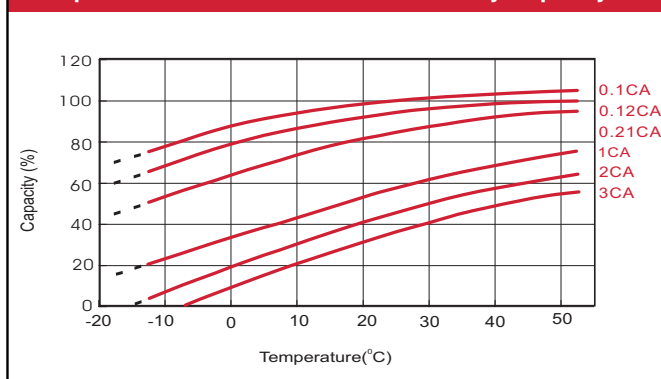
### Deep Cycle Batteries

Sealed lead acid batteries are engineered to provide reliable power in a compact design. They are spill-proof and require zero maintenance, as adding water is never necessary. The acid in the battery is suspended in a glass mat separator, which makes the cells leak-proof during normal battery operation. Our batteries are proudly designed in Canada with quality and performance in mind, offering one of the highest cycle life among other sealed lead acid battery brands. Canbat AGM batteries are manufactured with pure lead to ensure a low self-discharge rate of less than 2%, meaning stored batteries are only required a recharge once every six months. The series also features an outer container made from ABS material.

### Cycle Life Relation to Depth of Discharge



### Temperature Effects in Relation to Battery Capacity



### Capacity Based on Storage Time

