

# CLC190-12FT

12V 190AH

Pure Lead Carbon

# CANBAT

## CLC190-12FT



## Physical Specification

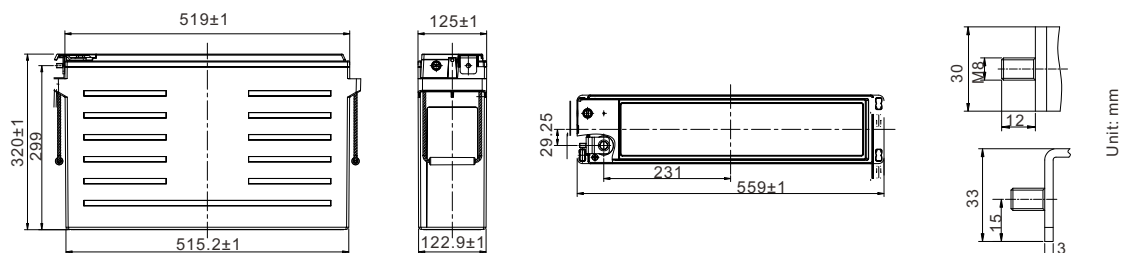
Part Number:	<b>CLC190-12FT</b>
Length:	<b>559 ± 2 mm (22.01 inches)</b>
Width:	<b>125 ± 2 mm (4.92 inches)</b>
Container Height:	<b>320 ± 2 mm (12.60 inches)</b>
Total Height (with terminal):	<b>320 ± 2 mm (12.60 inches)</b>
Approx Weight:	<b>57.6 kg (127.0 lbs)</b>

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	190AH
<b>Terminal Type</b>	Standard Terminal	M8
	Optional Terminal	M6
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	Non-halogenated, thermally sealed PPOI plastic casing & cover
<b>Rated Capacity(35°)</b>	190.0Ah	(C10 to 1.80VDC @ 25°C)
	190.4Ah	(C8 to 1.75VDC @ 25°C)
	167.0Ah	(C5 to 1.75VDC @ 25°C)
	132.9Ah	(C3 to 1.75VDC @ 25°C)
<b>Max Charge Current (A)</b>	57.0A	
<b>Max Discharge Current</b>	2280A	
<b>Internal Resistance</b>	Approx 3.0mΩ @ 25°C @ 1Khz	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -40 ~ 65°C
		Charge: 0 ~ 40°C
		Storage: -20 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Life	Exceptional PSoC cyclic performance 2500+ cycles at 50% Depth of Discharge (DoD)
	Features	Lead carbon added to negative electrodes increases power and reduces sulfation, leak-proof operation
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	79%
<b>Design Floating Life at 20°C</b>	20+ Years	
<b>Self Discharge</b>	Canbat Pure Lead Carbon Batteries may be stored for up to 24 months at 25°C (77°F). For higher temperatures, the time interval will be shorter. A refresh charge is required when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	

## Dimensions

### M8 Terminal



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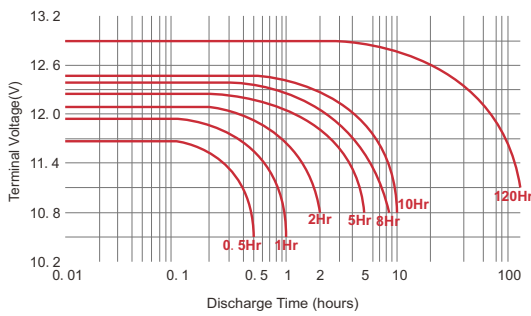
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	271.5	212.8	176.7	139.6	107.3	87.5	53.2	41.8	36.6	32.7	22.7	18.9	10.1
1.80V/cell	300.1	228.0	191.6	149.8	114.3	93.0	55.1	43.1	37.1	33.1	23.4	19.0	10.3
1.75V/cell	324.5	243.2	205.0	158.4	119.8	97.0	57.0	44.3	37.5	33.4	23.8	19.7	10.5
1.70V/cell	343.6	258.4	216.7	165.7	124.4	100.3	58.9	45.6	38.5	33.8	24.0	19.9	10.6
1.67V/cell	352.8	273.6	222.4	169.3	126.5	101.8	59.9	46.9	39.4	34.6	24.2	20.1	10.7
1.60V/cell	359.1	288.8	232.2	175.1	129.8	104.3	60.8	48.1	40.4	35.0	24.3	20.1	10.7

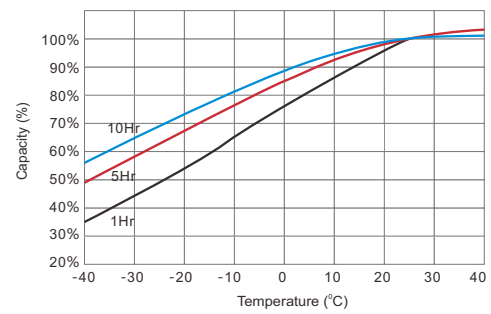
## Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	499.5	408.7	341.7	272.3	210.9	173.0	103.7	85.8	73.8	65.1	45.4	37.7	20.1
1.80V/cell	538.1	433.5	370.5	292.7	225.5	184.2	109.0	87.2	74.7	65.8	46.3	38.1	20.5
1.75V/cell	575.5	457.5	391.6	306.5	234.1	190.6	112.2	88.5	75.6	65.8	46.9	38.9	20.9
1.70V/cell	611.8	480.7	409.0	317.6	241.2	195.7	114.5	89.8	75.7	65.9	47.2	39.2	20.9
1.67V/cell	628.7	505.8	416.0	322.9	244.3	196.8	115.5	90.3	75.9	65.9	47.3	39.4	21.0
1.60V/cell	638.4	524.9	424.4	327.8	246.3	199.2	116.5	91.0	76.3	66.0	47.4	40.0	21.0

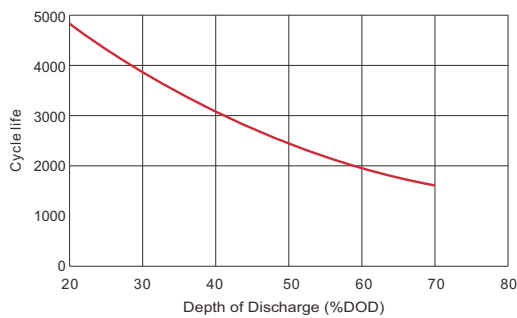
### Discharge Characteristics



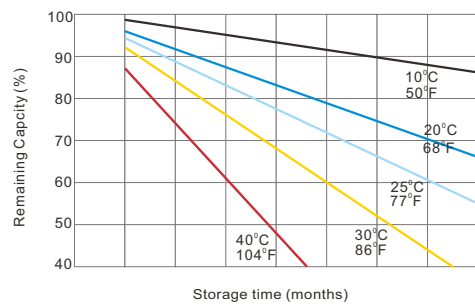
### Temperature in Relation to Capacity



### Cycle Life vs. Depth of Discharge



### Self-discharge Characteristics



### Features of Canbat Carbon Technology

- Exceptional PSoc cyclic performance 2500 cycles @50% DoD with a design life of 12+ years at 20°C (68°F)
- High modulus Polyphenylene Oxide (PPO) plastic, materials designed to withstand extended elevated operating temperatures.
- Flame retardant (UL 94 VO) and LOI of at least 28%
- Lead carbon added to negative electrodes increases power and reduces sulfation
- High potential fuel savings when used with hybrid genset applications
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation - brass terminals provide maximum performance
- Non-halogenated thermally sealed plastic casing