

# CT120-12

12V 120Ah Lead Acid Battery

CoolPower  
Solutions



The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

## Battery Construction

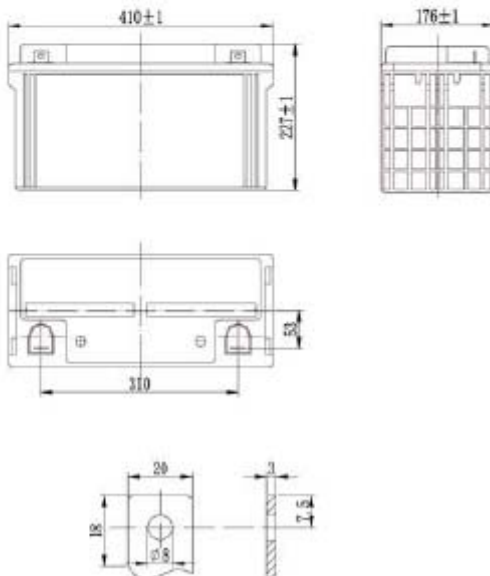
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

## General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

## Dimensions and Weight

Length(mm / inch)	410 / 16.14
Width(mm / inch)	176 / 6.93
Height(mm / inch)	227 / 8.94
Total Height(mm / inch)	227 / 8.94
Approx. Weight(Kg / lbs)	38 / 83.8



## Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
20 hour rate (6A, 10.5V)	120Ah
10 hour rate (11.4A, 10.5V)	114Ah
5 hour rate (19.6A, 10.5V)	98Ah
1 hour rate (76.4A, 9.6V)	76.4Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	4.3mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	950A(5s)
Short Circuit Current	2250A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	14.4-14.7V
Maximum charging current	36A
Temperature compensation	-30mV/°C
Standby use	13.6-13.8V
Temperature compensation	-20mV/°C

## Discharge Constant Current (Amperes at 77°F25°C)

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	359	272	220	122	76.4	30.5	20.7	11.7	6.22
1.65V	336	257	212	119	75.8	29.9	20.5	11.6	6.16
1.70V	312	243	203	115	74.3	29.3	20.1	11.5	6.08
1.75V	289	228	194	110	72.0	28.6	19.6	11.4	6.00
1.80V	266	214	186	108	69.8	27.8	19.3	11.2	5.90

## Discharge Constant Power (Watts at 77°F25°C)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	608	484	386	234	166	153	84.3	59.5	41.7
1.65V	577	460	373	227	163	151	82.8	58.8	41.5
1.70V	547	436	361	220	159	149	81.3	58.1	41.2
1.75V	517	413	348	213	155	145	79.8	57.4	41.0
1.80V	484	386	336	206	152	140	79.0	56.4	40.6

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