

### Overview

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 oneway 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	Pb	Fiberglass	Gelled acid

### General Features

- Micro millimeter SiO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> gelled electrolyte technology for efficiency 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.
- 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.
- Case and cover available in both standard and flame retardant ABS.

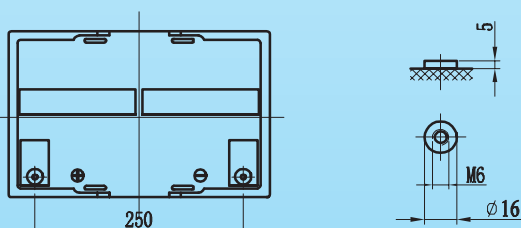
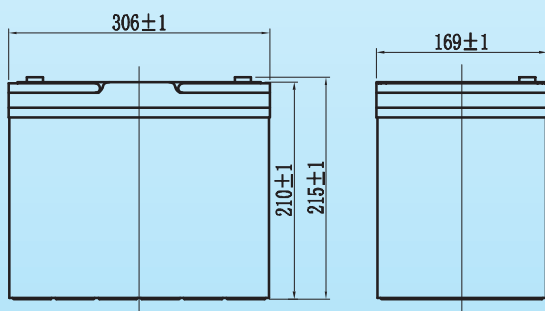
### Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Nominal Capacity 77°F(25°C)	
20 hour rate (4.6A, 10.5V)	92Ah
10 hour rate (9.0A, 10.8V)	90Ah
5 hour rate (16.2A, 10.5V)	81Ah
1 hour rate (62A, 9.6V)	62Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤5.9mOhms
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)	800A(5s)
Short Circuit Current	2000A

### Dimensions and Weight

Length(mm / inch)	306/12.04
Width(mm / inch)	169/6.65
Height(mm / inch)	210/8.27
Total Height(mm / inch)	215/8.46
Approx. Weight(Kg / lbs)	28.0/61.7

\* Weight deviation: ± 3%



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

End Point								
Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	218	173	100	74.7	62.0	27.0	17.2	9.30
1.65V	208	162	95.0	71.5	56.6	26.0	17.0	9.25
1.70V	186	153	90.0	67.9	56.0	25.0	16.7	9.18
1.75V	175	142	87.3	65.5	54.6	24.2	16.2	9.10
1.80V	163	132	84.2	63.0	52.4	23.1	15.7	9.00

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

End Point								
Volts/Cell	5min	10min	15min	45min	1h	2h	3h	5h
1.60V	373	308	189	145	117	65.5	48.3	32.3
1.65V	364	303	180	139	112	64.1	48.2	31.9
1.70V	345	284	171	129	107	61.8	46.8	31.5
1.75V	343	281	167	128	103	59.8	45.4	30.7
1.80V	314	267	163	125	101	59.1	45.2	30.3

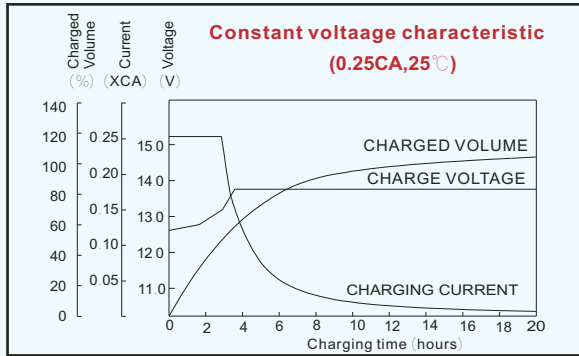
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



**VISION GROUP**  
Shenzhen Center Power  
Tech.Co.Ltd.,

# CG12-90TXA

12V 90Ah



**CHARGING METHODS:** Constant voltage charging at 25°C

Standby use: No charging current limit is required

Charging voltage: 2.20--2.30VPC

Cyclic use: Maximum charging current: 30% of rated capacity

Charging voltage: 2.40--2.45VPC

Temperature compensation :

stand by - 20mV/°C

cyclic use - 30mV/°C

