#### VISION GROL

Shenzhen Center Power Tech.Co.Ltd,.

#### **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.

# CTA12-85X 12V 85Ah(10hr)



### **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

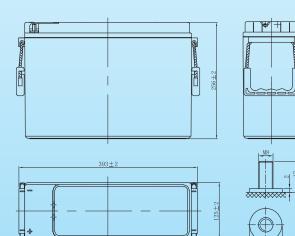
#### **General Features**

- 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.
- · Case and cover available in both standard and flame retardant ABS.

## Dimensions and Weight

Length(mm / inch)	393 / 15.5
Width(mm / inch)	125 / 4.92
Height(mm / inch)	256 / 10.1
Total Height(mm / inch)	256 / 10.1
Approx. Weight(Kg / lbs)	33 / 72.8

\* Weight deviation: ± 3%



## **Battery Specification**

Nominal Voltage12VNumber of cell6Design Life12yearsNominal Capacity 68°F(20°C)10 hour rate (8.5A, 10.8V)10 hour rate (8.5A, 10.8V)85Ah5 hour rate (15.9A, 10.5V)79.5Ah1 hour rate (60.8A, 9.6V)60.8AhInternal Resistance5Fully Charged battery 68°F(20°C)≤5.0mOhmsSelf-Discharge2%0°C(average)Operating Temperature Range0Discharge-20~60°CCharge-10~60°CStorage-20~60°CMax. Discharge Current 68°F(20°C)850A(5s)Charge Methods: Constant Voltage Charge68°F(20°C)Cycle use2.40-2.45VPCMaximum charging current30% of rated capacityTemperature compensation-30mV/°CStandby use2.20-2.30VPCTemperature compensation-20mV/°C	Performance Characteristics	
Design Life12yearsNominal Capacity 68°F(20°C)10 hour rate (8.5A, 10.8V)85Ah10 hour rate (15.9A, 10.5V)79.5Ah1 hour rate (60.8A, 9.6V)60.8AhInternal Resistance60.8AhFully Charged battery 68°F(20°C)≤5.0mOhmsSelf-Discharge3% of capacity declined per month at 20°C (average)Operating Temperature RangeDischargeDischarge-20~60°CCharge-10~60°CStorage-20~60°CMax. Discharge Current 68°F(20°C)850A(5s)Charge Methods: Constant Voltage Charge68°F(20°C)Cycle use2.40-2.45VPCMaximum charging current30% of rated capacityTemperature compensation-30mV/°CStandby use2.20-2.30VPC	Nominal Voltage	12V
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10 hour rate (8.5A, 10.8V)85Ah5 hour rate (15.9A, 10.5V)79.5Ah1 hour rate (60.8A, 9.6V)60.8AhInternal ResistanceFully Charged battery $68 F(20^{\circ}C)$ \$5.0mOhmsSelf-Discharge3% of capacity declined per month at $20^{\circ}C(average)$ Operating Temperature RangeDischarge-20~60^{\circ}CCharge-10~60^{\circ}CStorage-20~60^{\circ}CMax. Discharge Current $68^{\circ}F(20^{\circ}C)$ 850A(5s)Charge Methods: Constant Voltage Charge $68^{\circ}F(20^{\circ}C)$ Cycle use2.40-2.45VPCMaximum charging current30% of rated capacityTemperature compensation-30mV/°CStandby use2.20-2.30VPC	Design Life	12years
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Internal Resistance   Fully Charged battery 68 F(20°C) ≤5.0mOhms   Self-Discharge 3% of capacity declined per month at 20°C (average)   Operating Temperature Range Discharge   Discharge -20~60°C   Charge -10~60°C   Storage -20~60°C   Max. Discharge Current 68°F (20°C) 850A(5s)   Charge Methods: Constant Voltage Charge68°F (20°C) Cycle use   Cycle use 2.40-2.45 VPC   Maximum charging current 30% of rated capacity   Temperature compensation -30mV/°C   Standby use 2.20-2.30 VPC	5 hour rate (15.9A, 10.5V)	79.5Ah
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Operating Temperature RangeDischarge-20~60°CCharge-10~60°CStorage-20~60°CMax. Discharge Current 68°F(20°C)850A(5s)Charge Methods: Constant Voltage Charge68°F(20°C)Cycle useCycle use2.40-2.45VPCMaximum charging current30% of rated capacityTemperature compensation-30mV/°CStandby use2.20-2.30VPC		
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Standby use 2.20-2.30VPC	Maximum charging current	30% of rated capacity
	Temperature compensation	-30mV/℃
Temperature compensation -20mV/°C	Standby use	2.20-2.30VPC
	Temperature compensation	-20mV/℃

#### Discharge Constant Current (Amperes at 68°F20°C)

End Point								
1.60V	224	176	108	77.5	60.8	24.9	17.1	9.00
1.65V	209	163	103	73.9	59.5	24.4	16.7	8.88
1.70V	191	154	98.6	71.4	58.3	23.8	16.3	8.76
1.75V	181	145	94.7	69.7	56.2	23.3	15.9	8.67
1.80V	170	139	91.7	68.0	54.6	22.9	15.5	8.50

#### Discharge Constant Power (Watts at 68°F20°C)

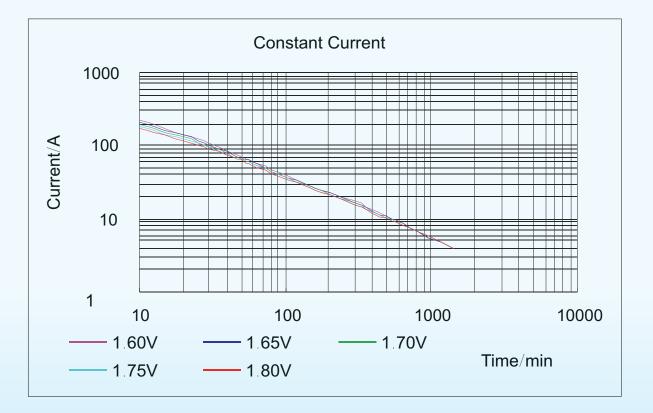
1.60V	388	302	189	141	113	63.0	46.8	32.6
1.65V	358	285	183	135	110	61.1	46.1	32.0
1.70V	332	270	174	131	108	60.2	45.4	31.3
1.75V	310	253	168	129	105	59.2	44.7	31.0
1.80V	282	234	160	125	102	58.3	43.9	30.5

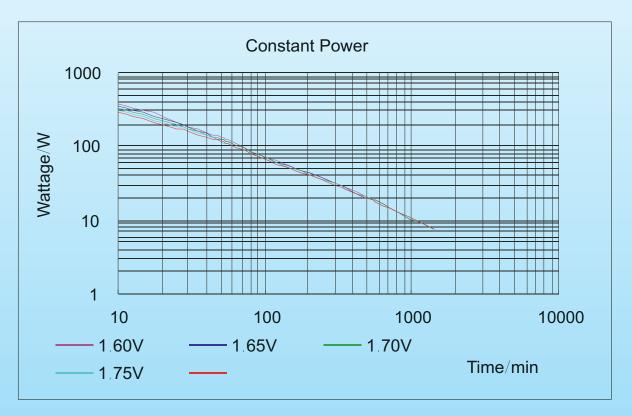
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.

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