# AP-300 BATTERY

## 1. Scope

This technical specification is for the product of AP-300 Ni-CD rechargeable battery pack.

## 2. Cell Type

Cell: Sealed Ni-CD Cylindrical Cell 6pcs pack

Model: J-7/5AA1200

Size: 7/5AA

# 3. Rating

Nominal Voltage: 7.2V per pack Nominal Capacity: 1200mAh

Standard Charging: 120mA charge 16 hrs Quick Charging: 1200mA charge 1.2 hrs Discharge End Voltage: 6.0V per pack Maximum Discharge: 2.4A Current

Weight: 209g

Charge Temperature: 0°C to 45°C Discharge Temp: -30°C to 60°C Storage Temperature: -20°C to 60°C

# 4. Physical Specification

Length: 140.8mm Width: 58.8mm Height: 23.0mm

**Maximum Overstep: 0.1mm** 

#### 5. Electrical Test

### 5.1 Charging Characteristics

The battery pack should be charged under the following conditions:

- --At a constant current of 120mA for 16 hrs (Standard Charges)
- --At a constant current of 1200mAh for 1.2 hrs (Quick Charge)

The above test are the ambient temperature of 20°C (+,-5°C)

### **5.2 Discharge Characteristics**

After adopt the above charge procedure as 5.1 the battery pack is stored for 1 hour at the same temperature range, this is to be discharged at various current till the end voltage reaches 6.0V

- --At 240mA discharge for 5hrs (0.2C)
- --At 360mA discharge for 3.3hrs (0.3C)
- --At 1200mA discharge for 54 minutes (1C)
- --At 2.4A discharge for 25 minutes (2C)

## 5.3 Capacity Characteristics

The battery pack should be at or more than 90% minimum under the above either charging or discharging procedure.

### 5.4 Charge retention

After stand charging procedure as per 5.1, the battery pack store for 28 days, then discharge the battery pack are 0.2C, the nominal capacity shall not be less than 65%.

- --Before using, the battery pack shall be properly charged as 5.1.
- -- Keep the battery pack in cool and dry place.
- --DO NOT throw the battery pack into fire or disassembles them.
- -- DO NOT short-circuit the battery pack
- -- DO NOT charge with more than specified current.

WARNING: This battery pack should be charged by proper specified charger.

After long storage, it is desirable to cycle (charge/discharge) the battery 3 times to restore full capacity.