

# ABFYY600 Series Battery Charger



## Product Features

- 600W
- Intelligent temperature control fan
- Circuit topology : Current Half-bridge type
- Voltage and current display and the charge curve can be set arbitrarily
- Dual-color LED charging status display
- MCU and intelligent PWM IC control .full automatic transition of CC,CV and Float/Cut-off, meet the demands for different Curve.
- Protections: Over Current, Over Voltage, Over temperature, Short Circuit, Reverse Polarity, shut off or trickle and anti-reverse charge
- Aluminum case, Robust, Elegant and Reliable

## 600W

Output power: 600W  
 Output circuit: Single output  
 Output voltage: 12 - 84V  
 Optional: 5.0V/12V standby voltage  
 Enable Control Optional: 5.0V/12V

## Electrical Specifications

|                     | Input                    |
|---------------------|--------------------------|
| Input range         | AC:100-120Vac/200-240Vac |
| Frequency           | 50-60HZ                  |
| Input Fuse          | 15A                      |
| Input maximum power | 682W                     |
| Efficiency          | > 88%                    |
| Leakage Current     | W 0.75mA                 |

Isolation Input to output: 1500Vac 50Hz 1 minute W 10mA  
 Input to case : 1500Vac 50Hz 1 minute W 10mA  
 Output to case: DC500V 50MQ Min.

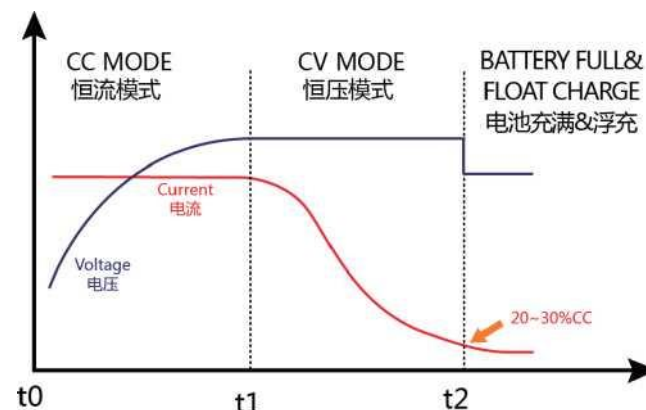
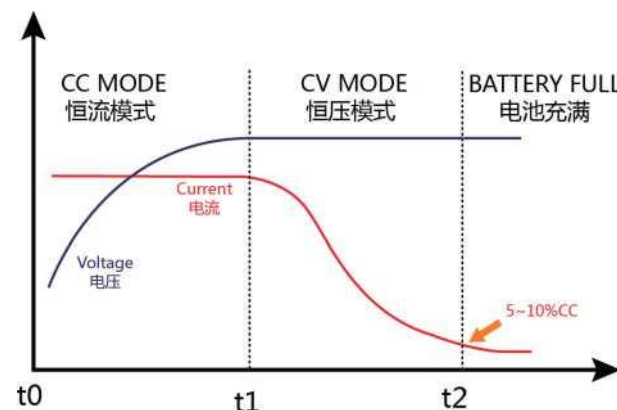
## Environmental Specifications

|                       |                            |
|-----------------------|----------------------------|
| Operating Temperature | -20°C - +40°C              |
| Storage Temperature   | -40°C - +70°C              |
| Operating Humidity    | 5% - 95% RH Non-condensing |
| Fan Noise             | W 55dB                     |
| Altitude              | 2000m                      |
| Anti-vibration        | 5mm/50Hz/600S              |

## Safety Certificate

UL  
 CSA  
 VDE  
 CE  
 CB Scheme  
 EN60950-1

## Charging curve



## Electrical Specifications

|                                      |                               |                                                                                                                                                 |
|--------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated output                         | Refer to output reference     |                                                                                                                                                 |
| Voltage setting accuracy             | ±1%                           | 110/220Vac input                                                                                                                                |
| Total output voltage adjustment rate | 1%                            | Power adjustment rate and load adjustment rate                                                                                                  |
| Ripple                               | W output voltage 1 %          | Main output (board edge)(Test with adding 0.1 uF ceramic capacitor and 10uF tantalum capacitor filter at the output and the bandwidth is 20MHz) |
| Short Circuit Protection (SCP)       | Protect the power from damage | Relay off, no output                                                                                                                            |
| Output isolation                     | -                             | Safety standards                                                                                                                                |
| Output Over Current Protection (OCP) | Disconnected the output       | The charger enter the standby protection state , when output current exceeds the max charging current.                                          |
| Output Over Voltage Protection (OVP) | PWM off                       | The charger enters the standby protection state, when output voltage exceeds the max charging voltage                                           |
| Over-temperature protection          | Automatic recovery            | 85°C (±5) Protect, 75°C (±5) Self-recovery                                                                                                      |
| Reverse Polarity Protection          | Automatic recovery            | Fuse/ Relay                                                                                                                                     |

## Output Reference

| Model | Nominal Voltage | Constant Voltage | Constant Current | Switching Current |                   | AC Input Plugs (optional) | DC Output Plugs (optional) | Adjustment Rate/Load Adjustment Rate |
|-------|-----------------|------------------|------------------|-------------------|-------------------|---------------------------|----------------------------|--------------------------------------|
|       |                 |                  |                  | Li (CC8%)         | Lead-acid (CC25%) |                           |                            |                                      |
| 1     | 12 V            | 14.6 V           | 25 A             | 2000ma            | 6250ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 2     | 24 V            | 29.4 V           | 20 A             | 1600ma            | 5000ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 3     | 36 V            | 43.8 V           | 12 A             | 960ma             | 3000ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 4     | 48 V            | 58.8 V           | 10 A             | 800ma             | 2500ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 5     | 60 V            | 67.2 V           | 8A               | 640ma             | 2000ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 6     | 72 V            | 87.6 V           | 6 A              | 480ma             | 1500ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |
| 7     | 84 V            | 102.9 V          | 5 A              | 400ma             | 1250ma            | Refer to AC input plugs   | Refer to DC output plugs   | 1%                                   |