



Dimensions:200(L)x153(W)x59(H)mm

**Features:**

- Wide AC input range
- RoHS compliance
- 3 - year warranty
- Over voltage protection
- Convection cooled
- Overcurrent protection
- Short circuit protection
- Reverse polarity protection
- Sparkle free design
- Smart charging control built-in MCU

**General Specifications**

**INPUT**

Input voltage.....115/230VAC±15%  
 Input frequency .....47~63Hz  
 Inrush current .....22A/115VAC  
 (Cold start) . . . . . 44A/230VAC

**OUTPUT**

Temp. Coefficient .....±0.04% / °C  
 Overvoltage protection .....Autorecovery  
 Over current protection ..... Current limited  
 Short circuit protection..... Shutdown  
 Transient response. .. (Load change 50% to 100%)  
 Voltage deviation .....5%  
 Recovery time .....2ms

**EMC STANDARDS**

|               |         |
|---------------|---------|
| EN 55011      | Class B |
| EN 55022      | Class B |
| EN 61000-4-2  | Level 3 |
| EN 61000-4-3  | Level 3 |
| EN 61000-4-4  | Level 3 |
| EN 61000-4-5  | Level 3 |
| EN 61000-4-6  | Level 3 |
| EN 61000-4-8  | Level 3 |
| EN 61000-4-11 | Level 3 |

**SAFETY STANDARDS**



EN 60335 (Meet)



UL 60335 (Meet)

**ENVIRONMENTAL**

**Operating temperature:** -20°C ~ 40°C ambient, derating each output at 2.5% per degree from 40°C to 60°C  
**Operating humidity:** Non-condensing, 5% ~ 95%RH.  
**Vibration:** Random vibration, 10Hz ~ 100Hz, 3axis.  
**MTBF:** 60,000hrs Min. Per MIL-HDBK-217F, 25°C GB.

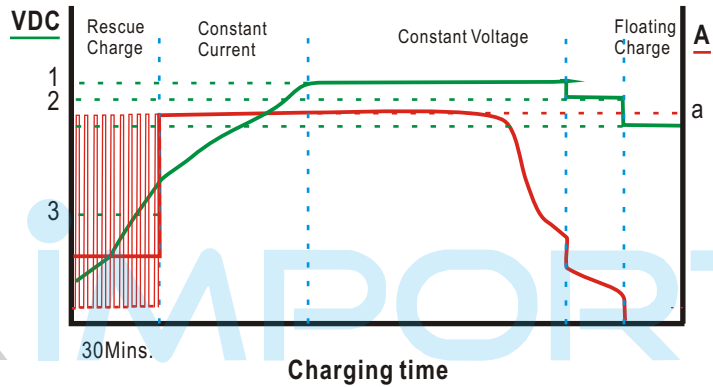
### Output Specifications

| Model   | Charging voltage |         | Charging current (A) | Line Reg. | Load Reg. | Efficiency | Overvoltage Protection |
|---------|------------------|---------|----------------------|-----------|-----------|------------|------------------------|
|         | Boost            | Float   |                      |           |           |            |                        |
| EPS1220 | 14.7VDC          | 13.8VDC | 20A Max.             | ±1%       | ±1%       | 84%        | 15~17VDC               |
| EPS2410 | 29.4VDC          | 27.6VDC | 10A Max.             | ±1%       | ±1%       | 86%        | 32~35VDC               |
| EPS3606 | 44.1VDC          | 41.4VDC | 6A Max.              | ±1%       | ±1%       | 86%        | 48~52VDC               |
| EPS4805 | 58.8VDC          | 55.2VDC | 5A Max.              | ±1%       | ±1%       | 86%        | 62~70VDC               |

- NOTE:**
1. Line regulation is measured from low line to high line at rated load.
  2. Load regulation is measured from 20% to 100% of rated load at 230VAC input.
  3. Efficiency is measured at rated load and 230VAC input.

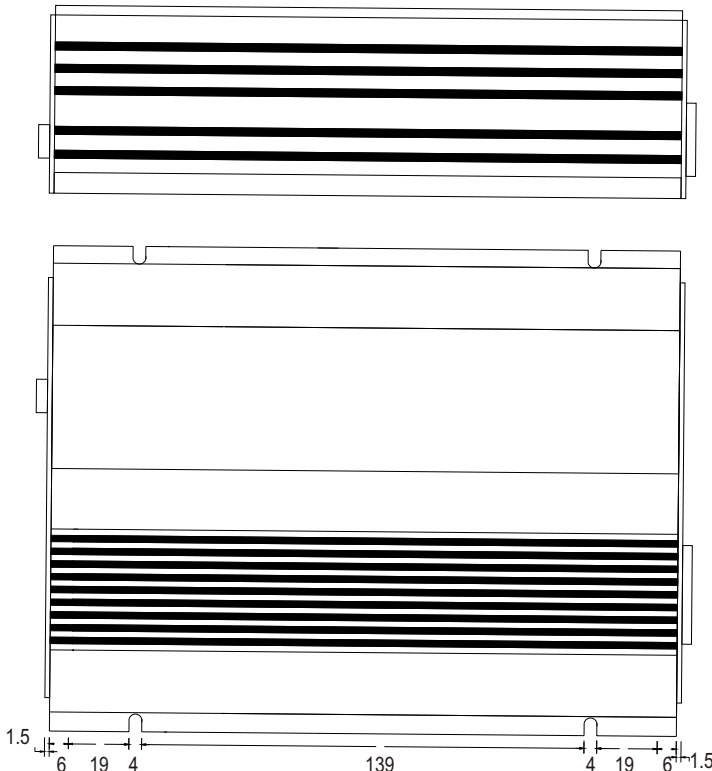
### Charging curve

| Code \ Type | 12V  | 24V  | 36V  | 48V  |
|-------------|------|------|------|------|
| a (A)       | 20   | 10   | 6    | 5    |
| 1 (VDC)     | 14.7 | 29.4 | 44.1 | 58.8 |
| 2 (VDC)     | 13.8 | 27.6 | 41.4 | 55.2 |
| 3 (VDC)     | 8.0  | 16.0 | 24.0 | 32.0 |



### Mechanical Details

Note: This phase is only executed if the battery voltage is less than 1.9 volts/cell.



Case No: AE1240C  
 Material: Aluminum (Extrusion)  
 Dimensions: 200(L)x153(W)x59(H)mm  
 Input connection: IEC320 C14 socket  
 DC output cable: 1.2m, 14 AWGx2 + alligator clip

