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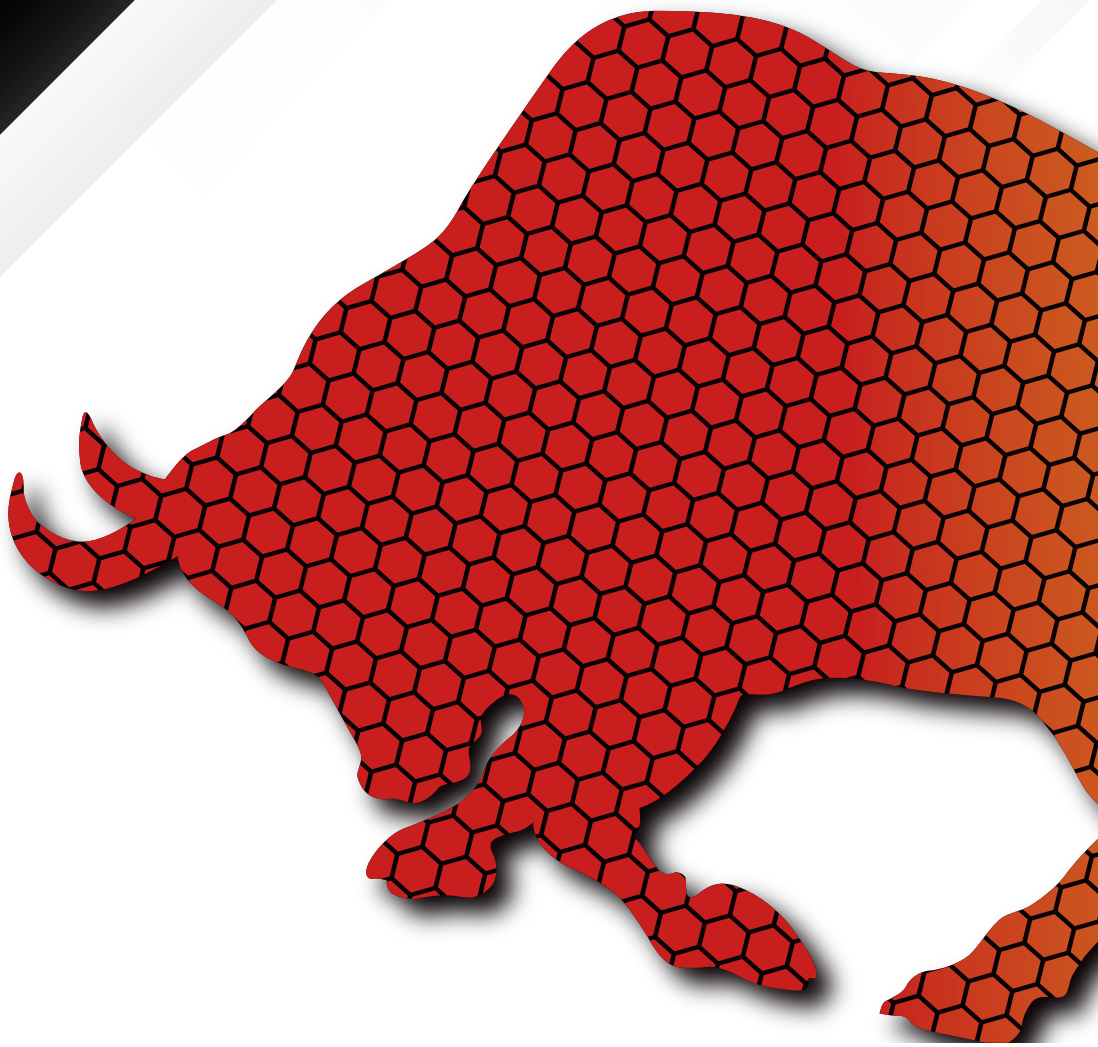

OLA-12-30-C

INTELLIGENT LITHIUM BATTERY CHARGER

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1.Scope

This approval is applicable to CYCH series chargers of lithium battery models.

2.Input Characteristics

2.1 Input Voltage

Nominal Voltage: 200～240Vac

Variation Range: 176～264Vac

2.2 Input Frequency

Nominal Frequency: 50/60Hz

Variation Frequency: 47～63Hz

2.3 Input Current

10Arms max at any input voltage and rated, DC output rated load.

2.4 Inrush Current

30Amps Max. Cold start at 240V ac input, with rated load and 25℃ ambient.

2.5 Ac Leakage Current

0. 25mA Max at 240V ac input.

3.Output Characteristics

3.1 Output Characteristics

Item	Min	Nominal	Max	Remark
Output voltage	8.0VDC		14.6VDC	Software continuously adjustable output range.
Output Current	0.5A		30A	During the constant current charging stage, the charging current must not be less than 10.0A
Efficiency		91.5%		50%~100%Load, rated input voltage.
Voltage ripple			±1% ±2%	Ripple effective value coefficient: ≦±1%, Ripple peak coefficient: ≦±2%
Output Voltage Error			±1%	Under normal temperature and constant voltage conditions, the output voltage setting error within the specified range does not exceed ±1%.
Efficiency			+5%~ -15%	Under the constant current state at room temperature of 25 degrees, the output current setting error does not exceed ±5%.

3.2 Turn On Delay Time

5 second Max. at 220V ac input and output Max. Load.

3.3 Rise Time

40ms Max. at 176V ac input and output Max. Load.

3.4 Hold Up Time

5ms Min. at 176V ac input and output Max. Load.

3.5 Overshoot

15% Max.When power supply at turn on or turn off.

4.Protective Function

4.1 Short Circuit Protection

The power supply will be auto recovered when short circuit faults remove.

4.2 Over current Protection

The power supply will be auto recovered when over current faults remove.

4.3 Over Voltage Protection

The power supply will not be auto recovered when faults remove.

4.4 Voltage Limiting Characteristics

When the charger is running in constant current state, when the output DC voltage reaches the voltage limiting setting value, it should be able to automatically limit its output voltage increase and convert to constant voltage charging operation.

4.5 Current Limiting Characteristics

When the charger is running under constant voltage, when the output DC current reaches the current-limit setting value, it should be able to immediately enter the current-limit state and automatically limit the increase of its output current.

5.Environmental Requirements

5.1 Operating Temperature

-0℃～50℃, Full load Normal operation.

5.2 Storage Temperature

-20℃～85℃（With package）.

5.3 Relative Humidity

5%～90% RH，72Hrs Full load Normal operating.

5.4 Vibration

1.Operating: IEC 721-3-3 3M3

5～9Hz,A=1.5mm（9～200Hz,Acceleration 5m/s²）

2. Transportation：IEC 721-3-2 2M2

5-9Hz，A=3.5mm

9～200Hz, Acceleration=5m/S²

200～500HZ,Acceleration=15m/S²

3. Axes,10 cycles per axis. No permanent damage may occur during testing.

The product has to restors its original situation after power off/on.

5.5 Drop Test

1 corner, 3 edges, and 6 surfaces.

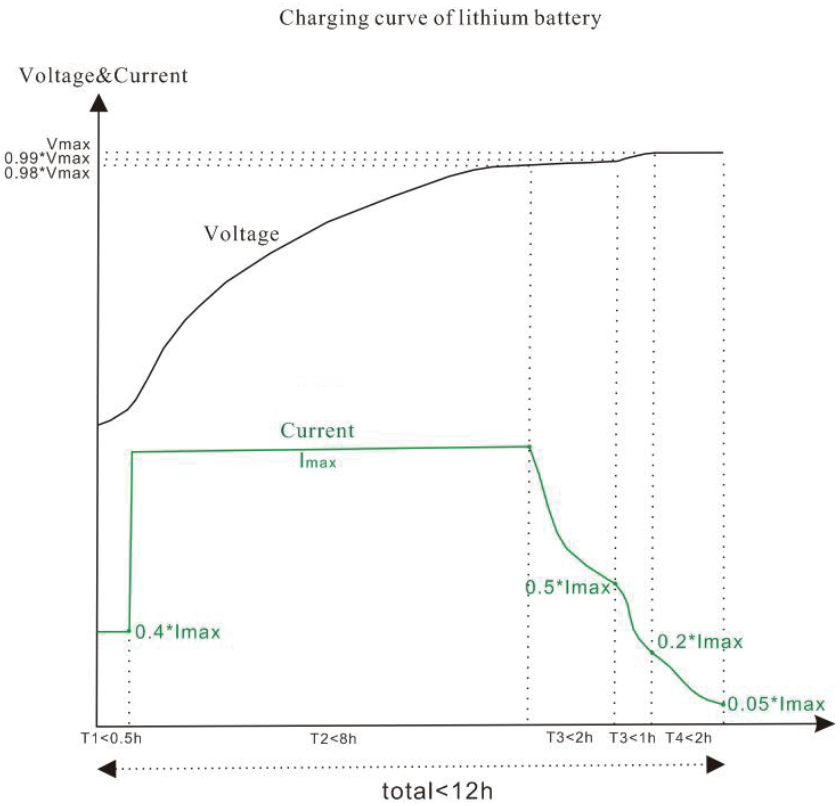
Height:76cm.

5.6 Altitude

Below 2000m.

6.Performance Requirements

6.1 Charging curve diagram



6.2 Charger LED indicator

LED indicator is an important sign to judge whether the charger works normally.

After the charger is powered on, the following prompt will appear:

- Red light on or flashing： During charging, the capacity is less than 90%.
- Green light flashing： Capacity more than 90%.
- Green light on： Full battery or no-load.
- Alternating red and green： Refer to the malfunction indicator status table.

6.3 Fault indicator status table

Indicator status description

Fault indicator status	Fault indicator status
R G - - - - -	Over current protection
R G R - - - -	Over voltage protection
R G R G - - -	Over temperature protection
R G R G R - -	Battery reverse connection
R G R G R G - -	Battery error
G R - - - - -	External temperature sensor error
G R G - - - -	Battery Overheating
G R G R G R - - -	Charger failure
G R G R G R G R G R	Charger lock

Note: "-" means the indicator is off for one second.

"G" is green LED, "R" is red LED.

7.Structural Parameters

7.1 Shell

Shell size : L246*W123*H72mm

7.2 Cooling method

The fan cools, and space is required before and after the charger to facilitate air convection when the fan is working.

8.Label

HIGH FREQUENCY INTELLIGENT CHARGER

Model: **12V30A**
Input Voltage: **AC176V~264V**
Battery type: **4s LiFePO4**
Maximum Out Voltage: **DC14.6V**
Maximum Out Current: **30A**

Charger Indicatior

- Red light on or flashing: During charging, capacity less than 90%.
- Green light flashing: Capacity more than 90%.
- Green light on: Full battery or no-load.
- Alternating red and green: Refer to the malfunction status table.

Matters Need Attention



For indoor use only.
Do not charge in rainy and humid places.
High voltage inside machine.
Amateur technicians cannot open the box.

CE FC EMC ISO 9001