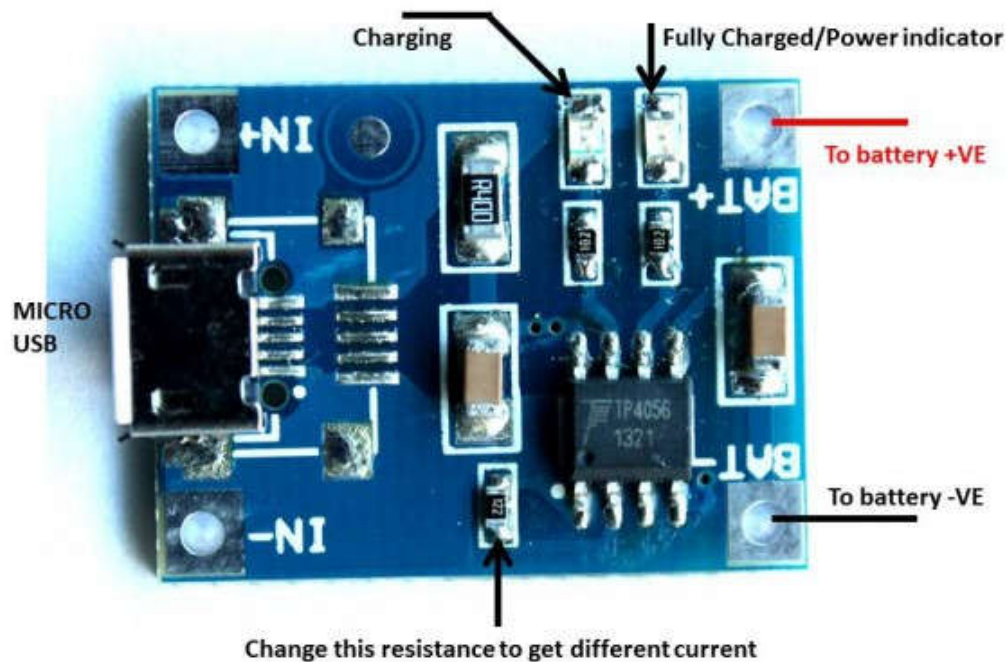


TP4056

Micro USB 5V 1A

Lithium Battery Charger Module



Description

This charger is a very small battery charger module. It uses the TP4056 controller and standard configuration is with 1A charge current.

It uses a Micro USB for connecting the breakout board to any computer or 'USB wall adapter'. It works with linear charging method. It offers 1000mA charge current by default but it is adjustable from 50mA to 1000mA by soldering a resistor. The default resistor soldered in on the board is 1.2K Ohm. Use the following table of resistance and current values to solder the right resistor to obtain the required current. A resistance and current table has been shown below on this page.

Technical Specifications

- Method: linear charge 1%
- Charging current: 1A Adjustable (Through RPROG)
- Charge Accuracy: 1.5%
- Input voltage: 4.5V-5.5V
- Full charge voltage: 4.2V
- LED indicator: Red is charging, and GREEN is full charged
- Charging input interface: Micro USB
- Working temperature: -10°C to +85°C
- Polarity Reversal: NOT ALLOWED
- Dimensions: 25 * 19 * 10mm

It is recommended that when you charge a battery, the current(in mA) offered by the breakout board is 37-40% of the battery capacity(in mAh). For example, if you are charging a battery of 1000mAh capacity, you should adjust the resistance in a way that the current offered is approximately 370mA-400mA.

Points to be remembered

- Ampere meter can only be connected to 5V input end of the module.
- It is recommended that the charging current is 37% of the battery capacity. If you charge the battery of 1000mAh, current of 400 is enough.
- The connection wire should not be too thick.
- No reverse polarity.

Current Regulation Chart

RPROG (k)	IBAT(mA)
30	50
20	70
10	130
5	250
4	300
3	400
2	580
1.66	690
1.5	780
1.33	900
1.2	1000