



Maker Power™

USB Power 12V

Features

USB Power Input
 Rugged USB Mini connector
 3 Fixed Voltages Out

- 12 VDC
- 5.0 VDC
- 3.3 VDC

 Internal Current/Thermal Limit
 Output Current up to 600mA each¹
 Flexible Connection Scheme

Applications

Maker Applications
 Circuit Prototyping
 Power Isolation
 Field testing
 Remote Area Power

Description

The USB Power 12V is a small power module that accepts USB power and provides three voltages. All three of these voltages are fixed and regulated outputs, 12VDC, 5.0VDC, and 3.3VDC. The module provides a small and convenient package that is the same form factor as other **Maker Power™** USB power modules. The module provides flexible connections. It will plug into a standard solderless breadboard, IDC 14 pin socket or a standard 14 pin ribbon cable.

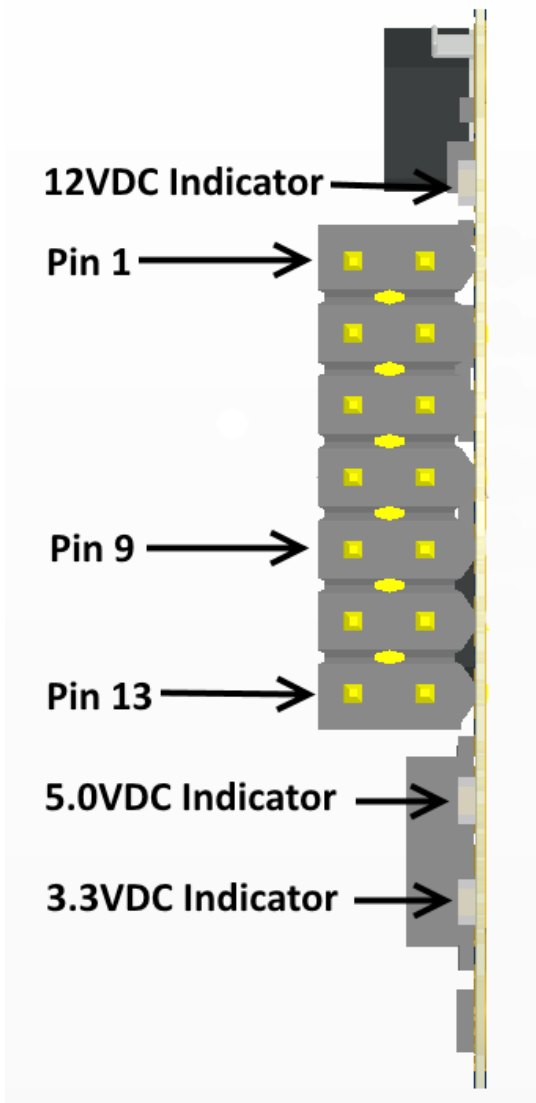
Electrical Characteristics

Parameter	Min	Max	Unit
Input Voltage	4.4	5.2	VDC
12 VDC Output @ 600mA	11.7	12.3	VDC
5.0 VDC Output @ 600mA	4.85	5.15	VDC
3.3 VDC Output @ 600mA	3.15	3.45	VDC
Quiescent Current		30	mA
Line Regulation		50	mV
Load Regulation		50	mV
Stability (Temperature/Long term) ²		0.75	%

Note 1. Total current out is dependent on the USB Power supply. Total current out cannot exceed current/power capability of the USB power supply. Typically the maximum total current is 2.1A or 10W.

Note 2. Stability only applies to 3.3VDC output.

PRELIMINARY



Pin	Function
1	12VDC
2	12VDC
3	No Connection
4	No Connection
5	5.0VDC
6	5.0VDC
7	3.3VDC
8	3.3VDC
9	GND
10	GND
11	No Connection
12	No Connection
13	No Connection
14	No Connection

Note

All specifications listed here were tested under ideal conditions, i.e. short load connections, well behaved circuits, stable USB power inputs, etc. This is **not** a laboratory grade product and is intended as a small and portable power supply for individuals testing and running small portable systems away from conventional power supplies. Your results will vary.