

Auterion 12S Power Module Datasheet

Description

This power module is suitable for applications with input voltage from 12 to 51 Vdc (LiPo batteries from 4s to 12s) and continuous current up to 100A.

It includes an integrated power monitor and two regulated output voltage rails with a total shared power budget of 60W.

Electrical Characteristics

Power Module

Parameter	Unit	Value
Input Voltage Range	Vdc	12 - 51
Input Protection (Transient)	kW	80
Continuous Pass-Through Current (Max)	A	100
20s Pass-Through Current (Max)	A	120

Connectors

- To Battery: AMASS [XT90PW-M](#)
- To ESCs: AMASS [XT90PW-F](#)

Integrated Power Monitor

Parameter	Unit	Value
Voltage Measurement Range	Vdc	0 - 85
Voltage Measurement Accuracy	mV	± 20
Current Measurement Range	A	0 - 136.5
Current Measurement Accuracy	%	± 5

Regulated output voltage 1

Parameter	Unit	Value
Output Voltage	V	5.3
Continuous Current (Max)	A	8
Line Regulation	%	± 2
Load Regulation	%	± 5

Connector

Molex [5055670681](#)

Pinout

Pin #	Function	Direction
1	5.3V Supply	Source
2	5.3V Supply	Source
3	I2C_SCL (I2C clock input for power monitor)	Input
4	I2C_SDA (I2C data line for power monitor)	I/O
5	GND	Sink
6	GND	Sink

Regulated output voltage 2

Parameter	Unit	Value
Output Voltage	V	10
Continuous Current (Max)	A	2.7
Line Regulation	%	± 2
Load Regulation	%	± 5

Connector

Molex [436500205](#)

Pinout

Pin #	Function	Direction
1	GND	Sink
2	10V Supply (for radio)	Source

Mechanical / Environmental Characteristics

Parameter	Unit	Value
Width	mm	48
Length	mm	72
Height	mm	39
Ambient Temperature range	°C	-40 - +50