

# 94W DC/DC Dual Output Converter Data Sheet



Green Watt Power's 94W DC/DC power modules are designed with compact size, low cost, high efficiency and high reliability. Featured with a fully sealed mechanical structure, this series offers solid and safe power conversions on electric bike, electric motorcycle and other DC/DC applications.

## Features:

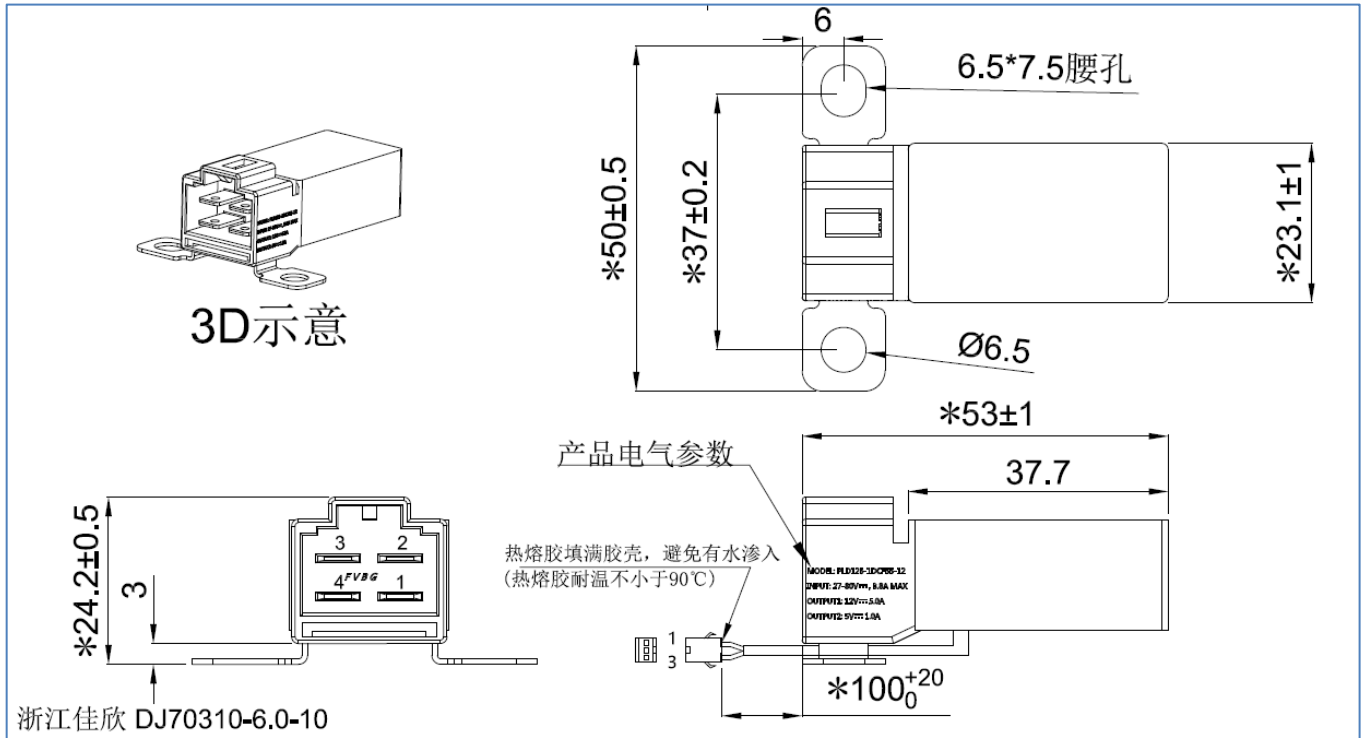
- Wide Input Voltage: 36~72Vdc
- Output Voltage A: 12Vdc @7A
- Output Voltage B: 5Vdc @1A
- High Efficiency 94.0%
- Temperature (Baseplate): Not to exceed 95°C
- IP67 Ingress Grade (Module only)
- Enable-circuitry (Optional)
- Compact design: 50 x 23.1 x 24.2mm
- No derating



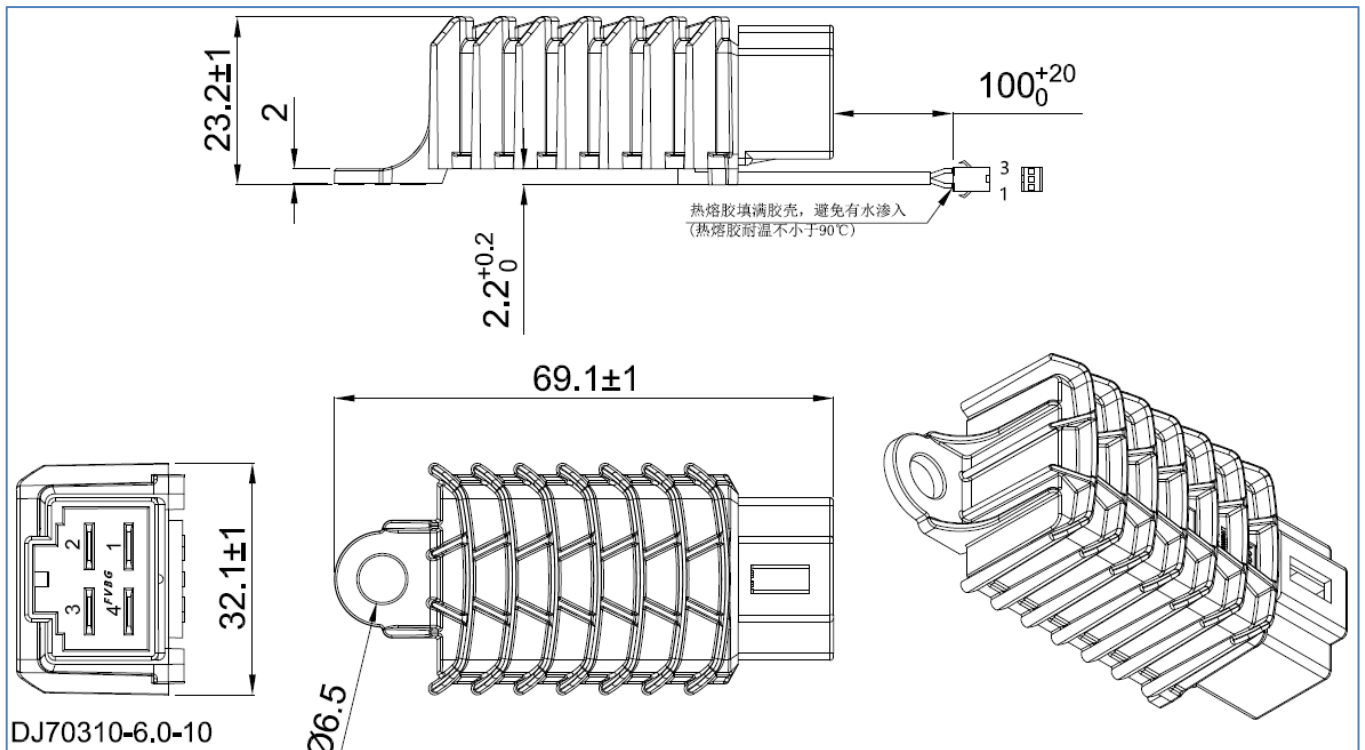
General Specifications	
Model (Standard Molded Version)	EVD-54-94-D12-5-STD (PLD125-1DCF55-12)
Model # with Enable	EVD-54-94-D12-5-STD-E (PLD070-EVGS02-12)
Model (Metal Cover Version)	EVD-54-94-D12-5-MET (PLD080-EVGY01-12)
Model #with Enable	EVD-54-94-D12-5-MET-E (PLD080-EVGS03-12)
Output Voltage Range	11. 4V~12.6V and 4.8V~5.4V
Output voltage ripple and noise (5MHz~20MHz Bandwidth)	720mVp-p for 12V 300mVp-p for 5V
Output Power	94W
Input Voltage	36~72Vdc
Max. Input Current	2.7A max. @ 36Vdc input & full load
Efficiency Typical	94% @ 36Vdc
Enable (Optional)	The voltage range for enable is same as Input Voltage
Protections	Over-Current Protection (OCP), Short Circuit Protection (SCP), Over Voltage Protection (OVP)
Over Temp Protection	When the power supply enters overheating protection condition, no components should be damaged. And return to normal operation after the fault condition is removed.
Output Short Circuit Protection	When output is shorted, the power supply will not have any output, and will self-recover when the fault condition is removed.
Ingress Protection	IP67 for module
Temperature (Baseplate)	Not to exceed 95°C
Temperature (Required to start)	-20°C
Storage Temperature	-40~85°C
Relative Humidity	10~90% Non-condensing
Cooling	Natural Cooling
Dimensions (LxWxH)	50 x 23.1 x 24.2mm
Isolation	Non-isolated
Weight	Standard Molded Version : 42g ± 10g , Metal Cover Version : 58g ± 10g

Notes: Specification is subject to change without notice. Model in parenthesis is factory number.

### Mechanical: Standard Molded Version



### Mechanical: Metal Cover Version



## Connector Info

Type	In Converter Cable Female	Manufacturer	Customer Connector (Male)	Manufacturer
Input and 12V Output (12V) Connector	4PIN: FB2204B/ 70410-6.3-10; 3PIN: FB2203A/ 70310-6.3-10	Jiaxin Electric Co., Ltd <a href="http://www.tzjxdq.com">http://www.tzjxdq.com</a>	70410-6.3-21	Jiaxin Electric Co., Ltd <a href="http://www.tzjxdq.com">http://www.tzjxdq.com</a>
5V Output Connector	HX25022-3P, HX25022-PT	Zhejiang Hongxing Electrical Co., Ltd <a href="Http://www.hxdy.cn">Http://www.hxdy.cn</a>	HX25023-3R, HX25023-RT	Zhejiang Hongxing Electrical Co., Ltd <a href="Http://www.hxdy.cn">Http://www.hxdy.cn</a>

### Pin Info: Input and 12V Output connector:

Pin No.	Function	Electrical determination
1	Vin+	Input voltage positive
2 (Optional)*	NC/Enable	No Connection/Enable
3	Vo+ 12V	Output voltage positive 12V
4	Ground	Ground

### Pin Info: 5V Output connector:

Pin No.	Function	Electrical determination
1	Vo+ 5V	5V positive
2	NC	No Connection
3	Ground	Ground

\* For enable option model, Pin 2 is present. For standard, pin 2 is not included. The voltage range for enable is same as Input Voltage