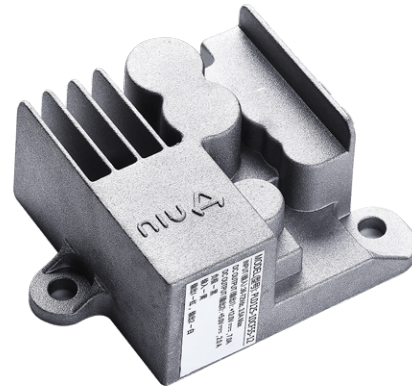


125W DC/DC Converter Dual Output Data Sheet

Green Watt Power’s 125W DC/DC power modules are designed with compact size, low cost, high efficiency, and high reliability. Featured with a fully sealed mechanical structure and 12V/10A and 5V/2A dual outputs, this series offers solid and safe power conversions on electrical bikes, electrical motorcycles, and other DC/DC applications.

Features:

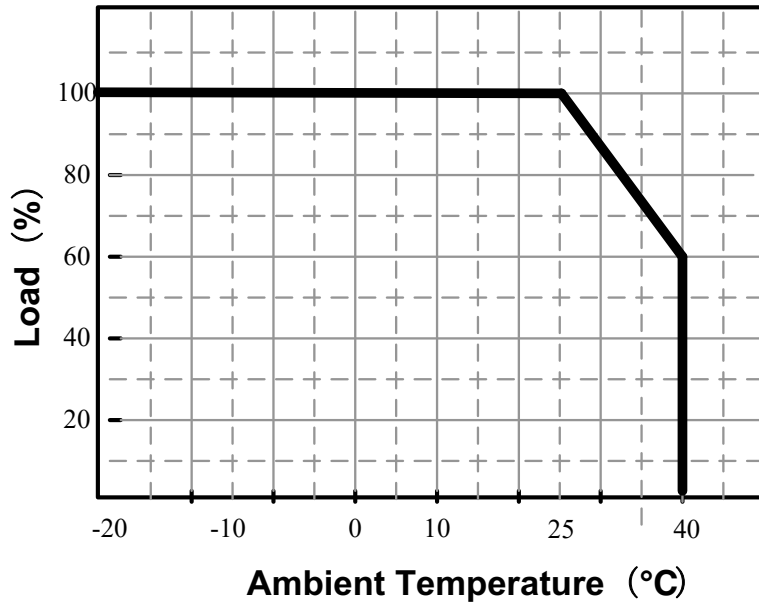
- Wide Input Voltage: 36~72VDC
- Dual Output Voltage: 12VDC & 5VDC
- High Reliability
- High Efficiency up to 89.5%
- Over Current, Short Circuit and Over Temperature Protection
- Natural Cooling
- Operating Temperature: -20~40°C
- IP65 Ingress Protection (except Connector)
- Enable Function



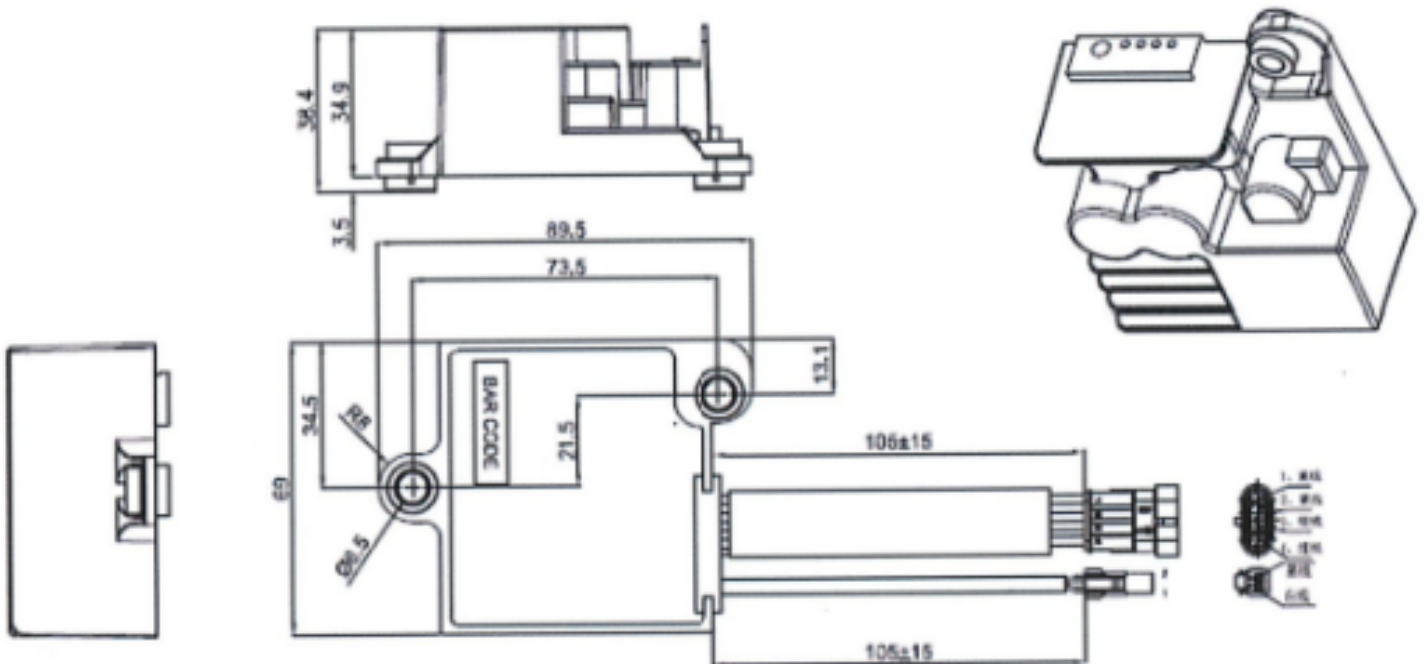
General Specifications	
Model (factory number)	EVD-60-125-D12-5 (PLD125-EVDN10-12)
Input Voltage	36 ~ 72VDC
Max. Input Current	4.5A
Efficiency Typical 36V/72V	89.5% / 86.0%
Input/Output Isolation	Non-isolated
Output Voltage	12VDC & 5VDC
Output Current (12V/5V)	8A / 2A (Continuous) 10A / 2A (Peak for 5min)
Output Voltage Accuracy	±5%
Output Power	106W (Continuous), 125W (Peak for 5min)
Enable	The voltage range for Enable is identical to the Input Voltage Range. Output enabled if signal is ≥36V and Off with no signal
Protection	OTP / OCP / SCP
Short Circuit Protection (SCP)	With output shorted, converter enters hiccup mode, with self-recovery after fault condition is removed.
Ingress Protection	IP65 (connector IP20)
Operating Ambient Temperature	-20 °C ~ 40°C (natural convection, see derating curve)
Case Temperature	-20 °C ~ 98 °C
Storage Temperature	-30 °C ~ 85°C
Dimensions (L x W x H)	89.5 x 69 x 40mm
Weight	258g
Hi-pot	Input & Output to Case: 800VAC / 5mA max / 60 seconds (3s for production)
MTBF	MTBF is >200,000 hours at 25 °C, Rated input, and full load at output.
Lifetime	The Lifetime is >15,000 hours at 25 °C, Rated input, and full load at output.

Note: Specification is subject to change without notice.

Derating Curve:



Mechanical Data:



Connector Info:

Input and 12V Output Connector (TE 282106-1)

Pin No.	Wire Color	Function	Description
1	Yellow (UL 1007 AWG#18)	Vin+	Positive Input voltage
2	Black (UL 1007 AWG#18)	Ground	Negative Input, Negative Output
3	Green (UL 1007 AWG#18)	ENABLE	Enable Function
4	Red (UL 1007 AWG#18)	Vo+ 12V	Positive Output Voltage +12V

Note: Vin-, 5V-, and 12V- are all common terminals (converter not isolated).
ENA (enable) function for model EVD-60-125-D12-5-E only.

5V Output connector (JST 02R-JWPF-VSLE-S)

Pin No.	Wire Color	Function	Description
1	White (UL 2464 AWG#22)	Vo+ 5V	+5V Positive
2	Black (UL 2464 AWG#22)	Ground	-5V Negative