



## 3000 Watt EVD DC-DC Converter Series

## **Description:**

Powerland's 3kW DC/DC power supply for air conditioning system is designed with extended protection functions, the next-generation semiconductor power devices, and the extraordinary thermal management. It is the industry's first design to cover full input voltage range of e-vehicle on-board air conditioning system DC/DC power supply, and feasible for a wide variety of electric vehicles..

## Features:

- Full Input Voltage Coverage for E-Vehicle Air Conditioning System
- Input Voltage: 200~880Vdc
- High Power Density and High Maintainability
- Ultra High Efficiency: Up to 96%
- Advanced EMI Design
- Suitable for High Inrush Current Application
- Designed with Next-Generation Semiconductor Devices
- Natural Cooling
- Max. Case Temperature @ 100oC
- CAN Communication
- All-Around Protections: OVP, OCP, SCP, OTP



## **General Specifications:**

Model	PLD3500-EVDTM02-14
Model	PLD3000-EVDYL01-27
Output Voltage	27.5V
Output Current	110A
Max. Output Voltage	27.5V
Output Voltage @ Open Circuit	27.5V
Voltage Accuracy	±2%
Output Power	3000W
Input Voltage	200~880Vdc
Max. Input Current	12A
Max. Input Power	3600W
Efficiency	96%
Communication	CAN
On/Off Control	Yes
Protections	OVP, OCP, SCP, OTP
Ingress Protection	IP54 (With System)
Working Temperature	-40~100oC
Cooling	Natural Cooling





Max. Case Temperature	100°C
EMI	GB18655 (With System)
Isolation	3500Vdc
Dimensions (LxWxH)	287x168x74mm
Weight	3.5kg
Life Time at 40oC, 380Vdc Input, and	50,000 Hours
Continuous Full Load Output	

Note: Unless otherwise noted, the data are based on  $25^{\circ}$ C ambient temperature, 380V input voltage, and full load.