

Description

Powerland's "Marble" series 500W isolated DC/DC is a ruggedized converter suitable for electric vehicle, marine, industrial and other applications which draw power from a bank of batteries or other high voltage DC power source that experiences high output surge current need. This series is designed with compact size, high efficiency and high reliability. It offers solid and safe power conversions to supply accessories, lights, and other equipment on electrical bike, electrical motorcycle and other DC/DC applications.



Applications

E-bike

E-motorcycle

Other DC/DC systems

Features

- · High Efficiency: Up to 94%
- All-Around Protections: UVLO, OVP, OCP, SCP, OTP
- Isolated Input / Output Design
- Working Case Temperature: 40~85°C

- On/Off Enable Control
- Very Low Quiescent Current (Less Than 30uA)
- · Supports Parallel Operation
- IP65 Ingress Grade



Specifications

| Model | PLD500- EVDG13-13 | PLD500- EVDG13-24 | PLD500- EVDG11-13 | PLD500- EVDG12-14 | PLD500- EVDG03-27 | | | |
|--------------------------|--|----------------------|----------------------|----------------------|----------------------|--|--|--|
| GWP Model | EVD-48-500-13 | ١ | EVD-80-500-13 | \ | \ | | | |
| Output Voltage | 13.5V | 24V | 13.5V | 14.2V | 27.5V | | | |
| Output Current | 38A | 20A | 38A | 36A | 18.5A | | | |
| Output Power | 500W | | | | | | | |
| Input Voltage | 30~65V | | 50~126V | | 50~130V | | | |
| Efficiency | 93% | | | | | | | |
| Protections | UVLO, APT,OVP,OTP,OCP,SCP | | | | | | | |
| Quiescent Current | <30uA | | | | | | | |
| Ingress Protection | IP67 | | | | | | | |
| Working Temperature | -40~85°C | | | | | | | |
| Cooling | Natural Cooling with Plate | | | | | | | |
| Max. Case Temperature | 85°C | | | | | | | |
| ЕМІ | EN55022 Class A, EN55032 Class A | | | | | | | |
| Isolation | Primary to Secondary: 1500Vac/10mA max./60s Primary to Earth: 1500Vac/10mA max./60s Secondary to Earth: 500Vac/10mA max./60s | | | | | | | |
| Dimensions (LxWxH) | 190x76x45mm | | | | | | | |
| Weight | 1.2kg | | | | | | | |

 $^{^{\}star}$ Unless otherwise noted, the data are based on 25°C ambient temperature, 96V input voltage and full load



Specifications

| Model | PLD500- EVDG13-13W | PLD500- EVDG13-24W | PLD500- EVDG11-13W | PLD500- EVDG12-14W | PLD500- EVDG03-27W | | | |
|--------------------------|--|-----------------------|-----------------------|--------------------------|-----------------------|--|--|--|
| GWP Model | EVD-48-500-13F | \ | EVD-80-500-13F | EVD-80-500-14FP- IP67 | EVD-80-500-27FP | | | |
| Output Voltage | 13.5V | 24V | 13.5V | 14.2V | 27.5V | | | |
| Output Current | 38A | 20A | 38A | 36A | 18.5A | | | |
| Output Power | 500W | | | | | | | |
| Input Voltage | 30~65V | | 50~130V | | 50~130V | | | |
| Efficiency | 93% | | | | | | | |
| Protections | UVLO, APT,OVP,OTP,OCP,SCP | | | | | | | |
| Quiescent Current | <30uA | | | | | | | |
| Ingress Protection | IP67 | | | | | | | |
| Working Temperature | -40~85°C | | | | | | | |
| Cooling | Natural Cooling with Plate | | | | | | | |
| Max. Case Temperature | <85°C | | | | | | | |
| ЕМІ | EN55022 Class A, EN55032 Class A | | | | | | | |
| Isolation | Primary to Secondary: 1500Vac/10mA max./60s Primary to Earth: 1500Vac/10mA max./60s Secondary to Earth: 500Vac/10mA max./60s | | | | | | | |
| Dimensions (LxWxH) | 190x76x45mm | | | | | | | |
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^{*} Unless otherwise noted, the data are based on 25°C ambient temperature, 96V input voltage and full load

