

Delphi Universal 2.2kW DC/DC Converter

Delphi's 2.2kW DC/DC Converter creates DC voltages in hybrid and electric vehicles necessary to power accessories and the HVAC system. Liquid-cooled, the DC/DC converter operates at input voltages from 216 to 422VDC with a power range to 2.2kW.

▶ **Minimum Order Quantity**

- 500

▶ **Benefits**

- In production
- Proven automotive design, reliable even in the harsh environment of the engine compartment
- Highly efficient conversion using synchronous rectification
- Applicable to multiple vehicle platforms without re-engineering

▶ **Features**

- Analog output voltage is adjustable through CAN serial communication; 11V – 15.5V
- Bi-directional capability supports charging of high-voltage battery
- Over-voltage, over-current, and over-temperature protection with fault reporting
- CAN serial interface

▶ **Specifications**

Input/Output	Input: HV (VDC) 216 – 422V LV (VDC) 7 – 15.5V Output: Buck (HV->LV): 2.2kW, max 175A @ 12.5V Boost (LV->HV): 600W, max 2.35A on HV Bus: CAN serial data bus for control and communications Efficiency: 90%
Packaging	Dimensions: 253mm x 257mm x 80 (56)mm Volume: 4.2L Weight: 5.0kg
Cooling	Coolant fluid: 50/50 mixture H ₂ O /Glycol (max 75°C) Coolant flow rate, pressure drop: 10 l/min, max pressure drop = 0.07 bar
Ambient Environment	Body-mounted, underhood Operating temperature: -40°C to 110°C
Lifetime	Operating life (over 15 years): >10,000h



Delphi's bi-directional 2.2kW DC/DC converter is in production.