



Delta-Q Technologies XV3300

3.3kW Battery Charging System for Lithium and Lead-Acid Chemistries

Built for light electric on-road vehicles and non-road mobile machinery, Delta-Q Technologies' XV3300 can optimally charge any nominal 48-, 80-, or 96-volt battery pack of any chemistry. Its unique design combines a high-performance 3.3kW charger, a 500W DC-DC converter, and an EV charging station interface, in a highly compact package. The XV3300 is the ideal solution for power-train electrification.



XV3300

Available Models	58.8V	65V	120V
XV3300 Models	✓	✓	✓
✓ Lithium		✓	
✓ Lead-Acid			✓

Charger Features



High Reliability

IP67-rated, rugged, sealed aluminum die-cast enclosure and connectors protects against vibration, shock, dirt, chemicals, and fluids. Automotive and non-road mobile machinery reliability ; tested to an 8-year service life.



DC/DC Converter

Delta-Q's patented integrated DC-DC converter technology provides 500W of auxiliary power for the operation of vehicle accessories such as air-conditioners, controllers, lights, turn signals, navigation and communication devices.



EV Charging Station Interface

Compliance with SAE J1772 (level 1 and 2) and IEC 61851 (mode 2 and 3) to charge from standard EV AC charging stations across North America and Europe.



Enhanced Protection

Extensive protection features, such as short circuit, output over-voltage, and over-temperature protections, ensure reliable and safe operation.



Global Standard Compliance

Compliance with North American, European, and UNECE R10 standards touch-safe voltage regulations allows for easy integration into electric vehicles.

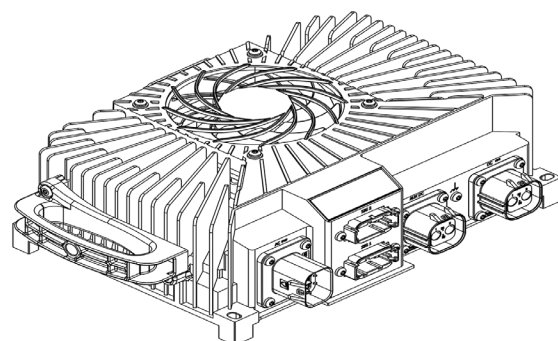


XV3300

OEM Features

- The combination of a battery charger, DC-DC converter, and EVSE interface saves space, weight, cabling, and cost.
- Class-leading 500W/ L power density presents space advantages for on-board installations.
- CAN bus communication supporting CANopen and SAE J1939 protocols with the battery management system (BMS) or vehicle control unit (VCU) ensures seamless machine integration to grant original equipment manufacturers (OEMs) wide flexibility in their design and deployment.
- The built-in filtering needed for grid certification, vehicle EMI/EMC requirements, and regulatory compliance speeds up OEM time to market.
- Scalable power from 3.3kW to 20kW for faster charging options. Chargers can be paralleled up to 6 units.
- Fan and liquid-cooled variants allow for integration in very compact vehicles and enclosed applications.

Application Examples



PRELIMINARY SPECIFICATIONS**

DC Output	58.8V Models	65V Models	120V Models
Nominal output power	Nominal output power 3300 W (1200W if AC input voltage <185Vac)		
Output voltage range	30 - 58.8 VDC (voltage Class A)	30 -65 VDC	70-120 VDC
Lithium cells in series	9 to16	9 to16	20 to 34
Max output current	65 A	65 A	40 A
Short circuit	Electronic current limit		
AUX DC Output	Drive Mode	Charging Mode	
Nominal power output	500 W	70W	
Nominal output voltage	13.7V (configurable from 12 to 14 V)	13.7V (configurable from 12 to 14 V)	
Output current	0 – 37 A	0 - 5 A	
Quiescent current draw	< 300 uA	< 300 uA	
AC Input	All Models		
AC input voltage range	85-265V		
Nominal AC input frequency	50/60 Hz		
Max AC input current	16 A		
Absorbed max apparent power	3.7 kVA		
Power factor correction	>0.98		
Communication	Premier & Essential Models	Advantage & Standalone Models	
Isolated CAN bus	CANopen and SAE J1939 protocols		
BMS wake up signal	12V / 2W		
Indicator	On-board multicolor LED		
EVSE	SAE J1772 (level 1 and 2) and EN 61851 (Mode 2 and 3)	-	
EV receptacle signals	Manual lock override; receptacle lock actuator; control up to 6 receptacle indication LED's	-	
Protection	All Models		
Input	Surge; over current; under voltage protections		
Output	Short circuit, over-load, reverse priority, over voltage protection, over temperature, current limit protections		
Mechanical	Fan Cooled Models	Liquid Cooled Models	
Dimensions (excluding connectors):	300 x 204 x 110 mm (11.8 x 8.0 x 4.3")	300 x 204 x 100 mm (11.8 x 8.0 x 3.9")	
Weight	7 kg (15.4 lbs)	6.5 kg (14.3 lbs)	
Cooling	Forced convection with variable speed fan	Liquid coolant (50:50% Glycol/Water)	
IP Protection	IP67		
AC Connector	Amphenol PCI series		
DC Connector	Amphenol PCI series		
Signaling Connector	TE Deutsch DT series		
Mounting holes	M6 diameter holes		

**Please note the above specifications are subject to change without notice.



PRELIMINARY SPECIFICATIONS**

Environmental		All Models
Efficiency	93% peak efficiency; California Energy Commission (CEC)	
Thermal fatigue/ Shock/ Vibration	GMW 3172; IEC 60068-2	
Operating temperature	-40°C to +65°C (-40°F to 149°F) Full nominal output power -35°C to +40°C (-31°F to 104°F)	
Storage temperature	-40°C to +85°C (-40°F to 185°F)	
Regulatory		All Models
Safety	UL1564, EN 60335-2-29, AZ/NZS60335 (RCM)	
Emissions	FCC Part 15 / ICES 003 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-6-3, CISPR 14.1, UNECE R10	
Immunity	EN 61000-6-2, UNECE R10	

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