

XV3300

XV Series



3.3 kW Battery Charging System for Lithium-Ion 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 rechargeable chemistry. Its unique design combines a high-performance 3.3 kW charger, a 500W DC-DC converter, and an EV charging station interface, in a highly compact package. The XV3300 is the ideal solution for powertrain electrification.



Available Models 58V 65V 120V

XV3300 Models



Application Examples



Charger Features



DC/DC Converter

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



High Reliability

The IP66/IP67-rated, rugged, sealed aluminum die-cast enclosure and connectors provide protection against vibration, shock, dirt, chemicals, and fluids. Designed for industrial and non-road mobile machinery reliability, it has been tested to an 8-year service life.



Enhanced Protection

Extensive protection features, such as short circuit, output overvoltage, input and output inrush current limiting, and over-temperature protections, ensure reliable and safe operation.



EV Charging System Interface

Compliant 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.



Scalable Power

The XV3300 can be easily paralleled up to six units to provide 3.3 kW up to 19.8 kW of power. It is scalable for faster charging options and heavy-duty vehicles.



Global Standard Compliance

Compliance with North American, European, Australian/New Zealand and UNECE R10* regulatory standards allows for easy integration into electric vehicles.

OEM Features

- The combination of a battery charger, DC-DC converter, and EVSE interface saves space, weight, cabling, and cost.
- Class-leading 500 W/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.
- Optimized configurations available. The product is also available as 2-in-1 or as a customized charger.

Specifications

Please note the specifications are subject to change without notice.

DC Output	58 V Models	65 V Models	120 V Models
Nominal output power	Nominal output power 3300 W (1200 W if AC input voltage <185 Vac)		
Output voltage range	30-58.8 VDC (voltage Class A)	30-65 VDC	60-120 VDC
Lithium cells in series	12 to 16	12 to 18	19 to 34
Max output current	65 A	65 A	40 A
Short circuit	Shut-off and Auto restart		
DC Quiescent current	<10 mA		
AUX DC Output	(optional)	12 V Models	24 V Models
DC/DC Converter nominal power output	500 W		
DC/DC Converter nominal output voltage	13.7 V (configurable 12 to 14 V)	27.0 V (configurable 24 to 28 V)	
DC/DC Converter output current	0–37.5 A	0–19 A	
AUX DC nominal power output	70 W		
AUX DC nominal output voltage	13.7 V (configurable 12 to 14 V)	27.0 V (configurable 24 to 28 V)	
AUX DC output current	0–5 A	0–2.5 A	
Quiescent current draw	< 300 uA		
AC Input			
AC input voltage range	85-265 V (100-240 V nominal)		
Nominal AC input frequency	50-60 Hz		
Max AC input current	16 A		
Power factor	>0.95		
Ground leakage current	<3 mA		
Standby AC power consumption	<7 W		
Communication			
CAN bus	CANopen and SAE J1939 protocols, UDS diagnostic supported		
BMS wake up signal	12 V / 2 W		
Indicator	On-board multicolor LED		
EVSE (optional)	SAE J1772 (level 1 and 2) and EN 61851 (Mode 2 and 3)		

Specifications

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Mechanical	
Dimensions (excluding connectors)	300 x 219 x 113 mm (11.8 x 8.6 x 4.4")
Weight	7 kg (15.4 lbs)
Cooling	Forced convection with variable speed fan
IP Protection	IP66/IP67
AC & DC Connectors	Amphenol PowerLok 4.0 Series
Signal Connectors	TE DEUTSCH DTM Series
Mounting holes	M6 diameter holes
Protection	
Input	Surge; over current; under voltage protections; AC input inrush current limitation (<16 A)
Output	Short circuit, overload, reverse polarity, overvoltage protection, overtemperature, current limit protections; DC output inrush current limitation
Environmental	
Efficiency	93% peak efficiency; California Energy Commission (CEC)
Thermal fatigue/ Shock/ Vibration	IEC 60068-2
Operating temperature	-40°C to +65°C (-40°F to 149°F) Full nominal output power -35°C to +35°C (-31°F to 104°F)
Storage temperature	-40°C to +85°C (-40°F to 185°F)
Chemical Resistance	Per MIL 810-G Method 504.1: Battery acid, gasoline, hydraulic oil, sulphur, water and sunblock
Salt spray	Per GMW 3172 Section 9.4.8: Withstands 30 days of salt spray test
Humidity (non-condensing)	0-95%
Acoustic noise	<50 dBa
Regulatory	
Safety	UL1564, CSA C22.2 No. 107.2, EN 60335 -1 / -2-29, AS/NZS 60335.1 / .2.29 (RCM)
Emissions	FCC Part 15 / ICES 003 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-6-3, EN 12895, UNECE R10*
Immunity	EN 61000-6-2, EN 12895, UNECE R10*
Compliance mark	     
Accessories	
900-0320	Handle and rubber feet accessory bundle
900-0241	AC connector strain relief
900-0245	Signal connector strain relief
900-0299	DC connector strain relief

* Available for select models.

Please reach out to your sales representative for all regulatory compliances.

