



Available model

Delta-Q Technologies ICL900

900W Industrial Lithium Battery Charger

The ICL900 is a compact, sealed, convection cooled, lightweight industrial and motive lithium battery charger. Designed to optimally charge lithium battery systems of any lithium chemistry used on electric vehicles including scooters, low-speed vehicles, boom lifts, automated guided vehicles, and sport and utility vehicles. The charger is available in both on and off-board configurations. CAN bus communication with a battery management system ensures seamless machine integration to grant original equipment manufacturers (OEMs) with flexibility in their design and deployment.



High Reliability

IP66- rated, rugged, sealed aluminum die cast enclosure protects against vibration, shock, dirt, chemicals, and fluids. Automotive reliability and tested to a 8-year service life.



Charge Quality

Custom lithium algorithms to optimize battery performance and life to meet tough application requirements.



OEM System Integration

CANbus enables OEMs to update charger software, algorithms, and extract charger status, charge history, fault and error logs. BMS can control the charger through CANbus or single wire interface.



Global and Efficient

Wide AC input voltage range capable of operating on any single-phase grid worldwide. 93% efficient and meets energy efficiency standards, including CEC.



Safety and Security

Enhanced security and safety for OEM applications through industry recognized CANopen and J1939 communication protocols.



UNECE R10 Standard Compliance

Compliance with UNECE R10 and European touch-safe voltage regulations allow for easy integration into electric vehicles.

ICL900 Charger Specifications

DC Output	57 V _{MAX}
Lithium charging voltage	18-57 VDC
Lithium cells in series	9 to15
Maximum DC output voltage	57.0 VDC
Maximum DC output current	27.0 A (18-36 VDC)
Maximum DC output power	900 W (36-57VDC)
Maximum dry contact current rating	0.5 A
Reverse polarity	Poka-Yoke DC terminals and electronic protection with auto-reset
Short circuit	Electronic current limit

AC Input		
AC input voltage range	85-270 VAC	
Nominal AC input voltage range	100-240 VAC	
Nominal AC input frequency	50 / 6	50 Hz
Maximum AC input current	11.5 A	
Nominal AC input current	10.1 A @ 100 VAC	8.4 A @ 120 VAC
	4.4 A @ 230 VAC	4.3 A @ 240 VAC
Nominal AC power factor	>0.99 @ 120 VAC	>0.98 @ 230 VAC

Regulatory*	
Efficiency	93% peak efficiency; California Energy Commission compliant
Safety	UL1564, EN 60335-2-29, AZ/NZS60335, Voltage Class A (less than 60 VDC)
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	CISPR 14.2, EN 61000-6-2, UNECE R10

Mechanical	
Dimensions	300 x 179 x 80 mm (11.8 x 7.0 x 3.15")
Weight	3.68 kg (8.1 lbs)
AC input connector	IEC320 / C14 Receptacle with Delta-Q AC cord retention tabs
DC output connector	Poka-Yoke threaded fasteners for ring terminals Negative: M6 Positive M8
Mounting holes	M6 diameter slots
Cooling	Passive (convection) cooling

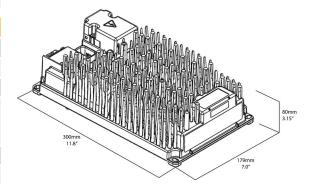
Environmental	
Enclosure	IP66 (NEMA4)
Mechanical shock & vibration	Shock: ISO 16750-3 chap. 4.2.2 Vibration: ISO 16750-3 chap. 4.1.2.4 (Test IV: vehicle body) GMW 3172
Operating temperature	-40°C to +65°C (-40°F to 149°F)
Storage temperature	-40°C to +85°C (-40°F to 185°F)

Please note the above specifications are subject to change.
*Will be expected to comply with the listed regulations



Usability Features

- ◆ CAN bus communication for machine BMS/telematic integration
- Meets voltage touch-safe regulations for EU electric vehicle
- Optional multi-colored remote LED indicator for battery status, charging, error and fault indication
- ◆ OEM customizable, field replaceable cable design
- ★ Field programmable with up to 25 charge profiles
- ★ OEM selectable CAN bus termination
- ➡ Interlock prevents vehicle from moving while charging.





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