



**Delta-Q Technologies RC Series** 

900W-1200W Battery Charger for Lithium and Lead-Acid Battery Chemistries

RC Series chargers are robust battery chargers certified for use on residential and industrial electric applications. Versatile CANopen and J1939 CAN bus features allow OEM's to extract charger status, update algorithm and software, and view fault and error logs. Suitable for applications in floor care, utility vehicles, aerial work platforms and material handling.



# **Charger Features**



#### Global + Efficient

Reliable operation on any single-phase grid worldwide. High-efficiency performance for electricity savings and shorter charge times.



### **OEM System Integration**

CAN bus enables OEMs to update the software of the charger, algorithms, and extract charger status, charger history, fault and error logs. For lithium-ion applications, the BMS can control the charger through CAN bus.



#### **Charge Quality**

Charge algorithms to precisely charge deep-cycle lead-acid and lithium batteries. Developed to balance charge time, battery life and application requirements. Over 200 algorithms available.



- CAN bus communication for machine telematics / BMS integration
- Safety interlock feature to protect vehicles while charging
- OEM customizable, field replaceable cable design
- · Auto-recharge for low voltage in maintenance mode
- · Optional battery temperature sensing and remote LED.
- Optional tri-color LED indicator for battery status, charging, error and fault







### **High Reliability**

Rugged, IP66 sealed aluminum die-cast enclosure protects against vibration, shock, dirt, chemicals and fluids. Manufactured in a world-class facility specializing in high-reliability solutions.



## **UNECE R10 Standard Compliance**

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



### On- and Off-Board Installations

Optionally available with a handle, the RC series can be installed both on-board the application and off-board.



RC900

# **Application Examples**











DC Output	RC900 <b>36V</b>	RC900 <b>48V</b>	RC1000 <b>24V</b>	RC1200 <b>36V</b>	RC1200 <b>48V</b>
Max DC output Voltage	54 VDC	72 VDC	36 VDC	54 VDC	72 VDC
Max DC output current	25 A	20 A	41.3 A	33 A	25 A
Max DC output power	900 W	900 W	1000 W	1200 W	1200 W
Deep discharge recovery (Lead-acid minimum voltage)	1.0V	1.0V	1.8V	1.8V	1.8V
Dry contact interlock current rating	1.0 A	0.3 A	1.0 A	1.0 A	0.3 A
Lithium final charging voltage	36-54 VDC	48-72 VDC	24-36 VDC	36-54 VDC	48-72 VDC
Lithium cells in series	8 to 14	10 to 19	5 to 9	8 to 14	10 to 19
Battery type	Lead-acid (wet / AGM / gel), lithium-ion				
Reverse polarity	Hardwired with Poka-Yoke DC terminals & electronic protection with auto-reset				
Short circuit	Electronic current limit				
AC Input	RC900 <b>36V</b>	RC900 <b>48V</b>	RC1000 <b>24V</b>	RC1200 <b>36V</b>	RC1200 <b>48V</b>
AC input voltage range	85-270 VAC				
Nominal AC input voltage range	100-240 VAC				
Nominal AC input frequency	50/60 Hz				
Max AC input current	10.5 A	10.5 A	11.25 A	14.0 A	14 A
Nominal AC input current	8.4 A @ 120 VAC	8.4 A @ 120 VAC	11.1 A @ 120 VAC	11.1 A @ 120 VAC	11.1 A @ 120 VAC
	4.3 A @ 240 VAC	4.3 A @ 240 VAC	5.7 A @ 240 VAC	5.7 A @ 240 VAC	5.7 A @ 240 VAC
Nominal AC power factor	>0.99 @ 120 VAC, >0.98 @ 230 VAC				
Mechanical	RC900 <b>36V</b>	RC900 <b>48V</b>	RC1000 <b>24V</b>	RC1200 <b>36V</b>	RC1200 <b>48V</b>
Dimensions	300 x 179 x 80 mm (11.8 x 7.0 x 3.2")				
Weight	3.65 kg (8.0 lbs) 3.55 kg (7.8 lbs)				
AC input connector	IEC320/C14 with Delta-Q country-specific AC cord				
DC output connector	Poka-Yoke threaded fasteners for ring terminals. Negative: M6; Positive M8				
Mounting holes	M6 diameter slots				
Cooling	Convection		Variable speed fan		
Regulatory			All Models		
Efficiency	93% peak efficiency; California Energy Commission (CEC) and Department of Energy (DOE) compliant				
Safety	CE, UL1564, EN 60335-2-29, AZ/NZS60335 (RCM), UL1564, EN 60335-2-29				
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				
Environmental	All Models				
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)				
operating temperature	-40°C to +85°C (-40°F to 185°F)				
Storage temperature		-400	C to +85°C (-40°F to 1	85°F)	
		-40°	C to +85°C (-40°F to 1)  All Models	85°F)	

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



