





### **delta-q** TECHNOLOGIES

## Delta-Q IC650

650W Industrial Battery Charger

Features	Benefits
Rugged, sealed aluminium die cast enclosure	<ul> <li>Protected against high vibration, extreme temperatures and water, chemical and dust ingress</li> <li>Installable on- or off-board in any orientation</li> </ul>
Two-way communication through charger USB host port	<ul> <li>USB flash drive retrieves detailed charging logs and updates charger software and QuiQ charge profiles</li> <li>Saves technician field visits by providing info for battery maintenance or troubleshooting</li> </ul>
Wide AC input voltage range, high efficiency and unity power factor	<ul> <li>Operates on any single-phase grid worldwide</li> <li>Meets CEC energy efficiency standards</li> <li>Reduced electricity costs</li> </ul>
QuiQ™ optimized charging profiles for all popular industrial battery brands and types	<ul> <li>Extend battery life and minimize charge times</li> <li>Auto- recharge for low voltage / storage ensures equipment is ready for use</li> </ul>
CAN bus and Modbus communication	Integrate charger with battery management system and vehicle / machine electronicsDelta





# Delta-Q IC650

#### 650W Industrial Battery Charger

DC Output	24 VDC	36 VDC	48 VDC
Nominal DC output voltage	24 V	36 V	48 V
Maximum DC output voltage	36 V	54 V	72 V
Maximum DC output current	27.1 A	18.1 A	13.5 A
Maximum DC output power	650 W	650 W	650 W
Deep discharge recovery (minimum voltage)	1.2 V	1.8 V	2.4 V
Maximum interlock current	1 A	1 A	1 A
Battery type	Lead acid (Wet / AGM / GEL), Lithium Ion		
Reverse polarity	Electronic protection with auto-reset		
Short circuit	Electronic current limit		

AC Input			
AC input voltage range	85-270 VAC		
Nominal AC input voltage	100-240 VAC		
Nominal AC input frequency	50 / 60 Hz		
Maximum AC input current	7.5 A		
Nominal AC input current	7.3 A @ 100 VAC	6.0 A @ 120 VAC	
	3.1 A @ 230 VAC	2.9 A @ 240 VAC	
Nominal AC power factor	>0.99 @ 120 VAC	>0.98 @ 230 VAC	

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Efficiency	93.5% peak, California Energy Commission compliant	
Safety	Approval pending to UL1564, CSA 107.2, EN 60335-2-29	
Emissions	FCC Part 15 / ICES 003 Class A, EN55011	
Immunity	EN61000-3-2, EN61000-3-3, EN 61000-4-2/-3/-4/-5/-6/-11	

Mechanical		
Dimensions	25.2 x 18.6 x 8 cm (9.9 x 7.3 x 3.1″)	
Weight	< 3 kg (< 6.5 lbs)	
AC input connector	IEC320 / C14 (requires country-specific cord)	
DC output connector	M6 threaded fasteners for ring terminals	
Service port	Sealed (IP66) USB 2.0 Host Port (Type A) with dust cover	
Mounting holes	Allows for safe installation on shelf, wall or bulkhead	
Cooling	Normal operation in any orientation with passive cooling only	

Environmental		
Enclosure	IP66 (N	NEMA4)
Operating temperature	-40oC to +65oC	Derated at >40oC
Storage temperature	-40oC to +85oC	



#### Features

- Multi-colour LED indicator for AC source, battery status (<80% / >80% / completion), charging, alarm, fault
- Numeric display for charge profile, alarm / fault codes
- Field programmable with up to 25 QuiQTM charge profiles
- OEM customizable, field replaceable cable design

#### Dimensions





