

# Delta-Q IC650

## 650 W Industrial battery charger



- Small industrial battery charger (weight < 3 kg, 252 x 186 x 80 mm)
- For small aerial work platforms, scrubbers & sweepers, personnel & burden carriers ...
- Keep track of every load cycle thanks to the detailed data logs

Technical details	Advantages
Rugged, sealed aluminium die-cast enclosure	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>+ Integrate charger with battery management system and vehicle/machine electronics</li> </ul>

© November 2013. TVH® is a registered trademark. TVH is a supplier of after-market spare parts and accessories that are suitable for the maintenance and repair for OEM-equipment. Photographs and illustrations are included for reference purposes only. All sales are subject to the general terms & conditions of sale on [www.tvh.com/avv](http://www.tvh.com/avv)



**TVH PARTS NV • PARTS & ACCESSORIES DIVISION**  
 Brabantstraat 15 • BE-8790 Waregem  
 T +32 56 43 42 11 • F +32 56 43 44 88 • [parts@tvh.com](mailto:parts@tvh.com) • [www.tvh.com](http://www.tvh.com)

# IC650 Specifications



DC output	24 VDC REF 141TA7908	36 VDC REF 141TA7909	48 VDC REF 141TA7910
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

Regulatory	
Efficiency	93,5% peak
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

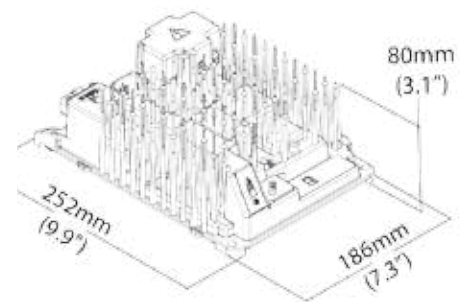
Mechanical	
Dimensions	252 x 186 x 80 mm (9,9 x 7,3 x 3,1")
Weight	< 3 kg (< 6,5 lbs)
AC input connector	IEC320/C14 (requires country-specific cord)
DC output connector	M6 threaded fasteners for ring terminals
Service port	Sealed (IP66) USB 2.0 Host Port (Type A) with dust cover
Mounting holes	Allows for safe installation on shelf, wall or bulkhead
Cooling	Normal operation in any orientation with passive cooling only

Environmental		
Enclosure	IP66 (NEMA4)	
Operating temperature	-40 °C to 65 °C (-40 °F to 149 °F)	Derated at >40 °C (104 °F)
Storage temperature	-40 °C to 85 °C (-40 °F to 185 °F)	

## Features

- Multi-color 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 QuiQ™ charge profiles
- OEM customizable, field replaceable cable design

## Dimensions



Including European power cord