



650



Available models:

| | | |
|-------------|-------------|---------------|
| 24 V / 27 A | 36 V / 18 A | 48 V / 13.5 A |
|-------------|-------------|---------------|

Delta-Q IC650

650 W Industrial Battery Charger

Capable of charging lead acid (wet, AGM, gel) and lithium battery chemistries, the IC650 Charger is available in on- and off-board configurations. Optional CAN bus communication ensures seamless machine integration and AC/DC cabling is completely customizable. Applications include: scissor lifts, lift trucks, floor care machines, and golf cars.



High Reliability

Engineered using design for reliability. Validated for long service life in worst-case operating conditions. Tested to perform reliably and durably in automotive applications. Manufactured in a world class facility specializing in high reliability solutions.



Easy to Integrate

Assists machine troubleshooting with built-in charge cycle tracking. Download data / upgrade software through USB host port. Optional CAN bus communication enables deep machine integration, diagnostics and control.



Charge Quality

Charge profiles to precisely charge deep-cycle lead acid and lithium batteries. Developed in Delta-Q's battery lab to balance charge time, battery life and application requirements.



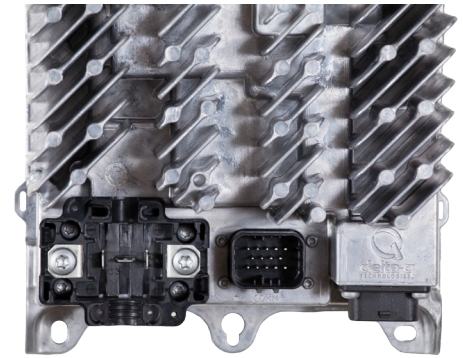
Global + Efficient

Capable of operating reliably on any single-phase grid worldwide. High-efficiency performance for electricity savings and shorter charge times.

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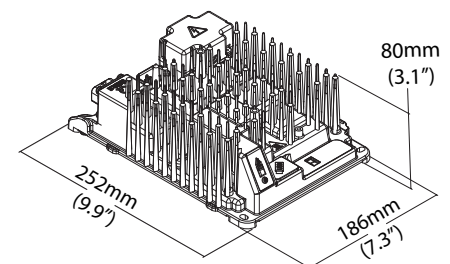
IC650 Charger Specifications



Usability Features

- + Optional CAN bus communication for machine integration or lithium BMS
- + Multi-color LED indicator for AC source, battery status, charging, error, fault
- + Numeric display for charge profile, alarm/fault codes
- + Field programmable with up to 25 charge profiles
- + Auto-recharge for low voltage in maintenance mode
- + OEM customizable, field replaceable cable design
- + Optional carrying handle

Dimensions



Web: delta-q.com
 Phone: +1.604.327.8244
 E-mail: sales@delta-q.com

Delta-Q Technologies
 3755 Willingdon Avenue
 Burnaby, BC V5G 3H3
 Canada

| DC Output | 24 VDC | 36 VDC | 48 VDC |
|---|--|--------|--------|
| 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 | | |
| Deep discharge recovery (minimum voltage) | 1.2 V | 1.8 V | 2.4 V |
| Maximum C3 interlock signal current | 1.5 A (15 A with external interlock device, 24V model only) | | |
| Battery type | Lead acid (Wet / AGM / GEL), lithium | | |
| 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 | |
| Power factor | >0.99 @ 120 VAC | >0.98 @ 230 VAC | |

| Regulatory | |
|------------|---|
| Efficiency | 93.5% peak, California Energy Commission compliant |
| Safety | UL1564, CSA 107.2, EN 60335-2-29, AZ/NZS60335 (RSM) |
| Emissions | FCC Part 15 / ICES 003 Class A, EN55011, EN 61000-6-4 |
| Immunity | EN 61000-3-2, EN 61000-3-3, EN 61000-6-2 |

| 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 |

| Environmental | | |
|------------------------------|---------------------------------|--------------------------|
| Enclosure | IP66 (NEMA4) | |
| Mechanical shock & vibration | GMW3172 | |
| Corrosion & humidity | | |
| Thermal fatigue | | |
| 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) | |

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