

# QA3000A SERIES ON-BOARD SEAL CHARGER

This series chargers design of sealed structure. It suitable for flooded lead acid batteries, sealed lead acid batteries, lithium-ion batteries, LifePO4 batteries, nickle cadmium batteries and etc. They are used to cycle charge or floating charge battery pack in electric cars, sightseeing vehicles, patrol vehicles, fork lifts, AGV, aerial work platforms, floor sweepers, electric motorcycles, electric sweepers, electric surfboards, electric golf carts, electric vehicles, electric tricycle and so on.

Models	Rated Voltage for Battery Pack	Max Output Voltage	Max Output current	Different Batteries			Transition/cut-off Current
				Lead Acid	Li-ion	LiFePO4	Li
QA3000A-48V50A	48V	68V	50A	58.8V	54.6V	58.4V	5.0A
QA3000A-60V35A	60V	85V	40A	73.5V	67.2V	73.0V	4.0A
QA3000A-72V30A	72V	102V	35A	88.2V	84.0V	87.6V	4.0A



## TECHNOLOGY PARAMETERS

- AC Input Voltage Range: 180-264VAC; 45-65Hz
- AC Input Max Current: 14A@220VAC
- Power Factor:  $\geq 0.99$
- Efficiency:  $\geq 94.0\%$
- Noise:  $\leq 45\text{dB}$
- Protection Grade: IP67

## PRODUCT CHARACTERISTICS

### SAFFTY

● Active PFC and LLC technique is applied for a rapid respond on a fault; Quick active software self-protection and reliable passive hardware self-protection on voltage & current; Advanced charging strategy is integrated as a safeguard for battery system.

### RELIABILITY

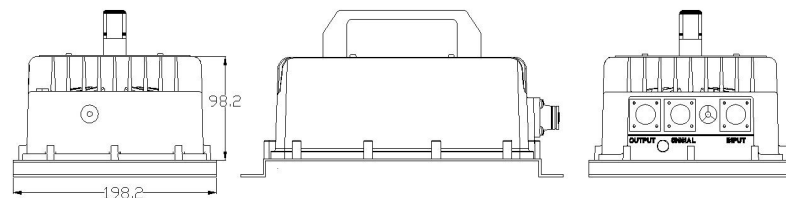
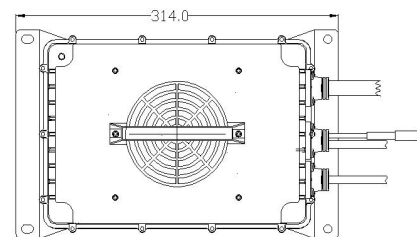
● The shell is shaped by integrated die casting technique. And filled with special glue. The active cooling fan is also designed to be a fan with a potting structure and a longer life. This charger series have been operating in all kinds of industrial environment (wet. hot. cold. high altitude)for more than ten years, the design is proved to pass the verification.

### FUNCTIONS

- CAN BUS Interface
- Triple Colors Indicator
- Charging Interlock System
- Auxiliary power supply 12V

### SIZE & WEIGHT & TEMPERATURE

- Net Weight: 6.5kg
- Operating Temperature:  $-30^{\circ}\text{C}$ — $65^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}\text{C}$ — $95^{\circ}\text{C}$
- Size: 315\*199\*126mm



## PROTECTION FUNCTIONS

● Burnout Protection: Temperature of charger exceeds the limitation. The charge will low down the power load. Temperature of environment exceeds  $65^{\circ}\text{C}$ , the charger will stop charging and switch itself to standby mode until temperature of environment goes down.

● Protection for Reverse Connection of Batteries: The circuit inside the charger shuts down with batteries when the batteries are connected reversely and will not damage the charger.

● NO-load Protection: There is no output when the batteries are not connected.

● Short Circuit: The circuit inside the charger shuts down with batteries when output is short circuit. The charger will start charging only after troubleshooting and restart the charger.

● Automatic Shutdown When Fully Charging: The charging automatically turns off after the battery is fully charged according to the charger's judgment.