QA600A Series — 600 W Sealed On-board Battery Charger

Slim die-cast housing, 193 × 124 × 67 mm, 1.7 kg, IP65. Six models from 12 V to 60 V packs, sealed structure with potted fan and three-colour charge indication.

KEY FEATURES

- **Six models**, QA600A-12V25A to QA600A-60V06A, 06 A to 25 A
- **Sealed die-cast shell**, filled with potting compound; potted cooling fan
- **Active LLC topology** — fast fault response, software and hardware self-protection
- **≥92.0 % efficiency**, noise ≤45 dB
- **AC 90–132 V / 180–264 V**, 47–63 Hz; AC input current 3.0 A at 220 V AC
- Three-colour indicator lights
- CV setpoints per chemistry, plus a defined cut-off current
- **IP65**, 193 × 124 × 67 mm, 1.7 kg

MODELS

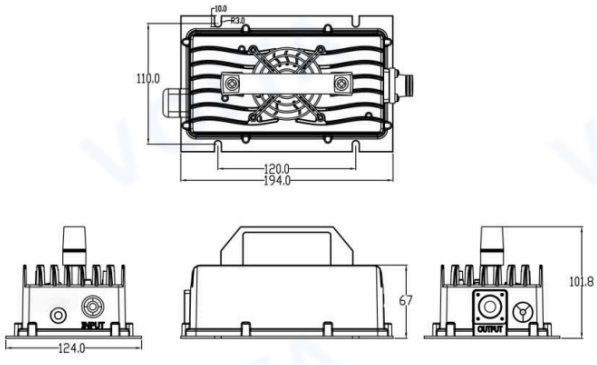
Model	Rated V	Output range	Max current	CV lead-acid	CV Li-ion	CV $LiFePO_4$	Cut-off (Li)
QA600A-12V25A	12 V	17 V	25 A	14.7 V	12.6 V	14.6 V	3.0 A
QA600A-24V15A	24 V	34 V	15 A	29.4 V	29.4 V	29.2 V	1.5 A
QA600A-24V20A	24 V	34 V	20 A	29.4 V	29.4 V	29.2 V	2.0 A
QA600A-36V15A	36 V	47 V	15 A	44.1 V	42.0 V	43.8 V	1.5 A
QA600A-48V10A	48 V	66 V	10 A	58.8 V	54.6 V	58.4 V	1.0 A
QA600A-60V06A	60 V	84 V	06 A	73.5 V	67.2 V	73.0 V	1.0 A

CV = constant-voltage setpoint. Chargers suit flooded and sealed lead-acid, lithium, Ni-MH and Ni-Cd batteries.

TECHNOLOGY PARAMETERS

AC input voltage range	90–132 V & 180–264 V, 47–63 Hz
AC input max current	3.0 A at 220 V AC
Efficiency	≥ 92.0 %
Noise	≤ 45 dB
Protection level	IP65
Operating / storage temperature	−30 °C to +65 °C / −40 °C to +95 °C

DIMENSIONS



Case size (L×W×H)	193 × 124 × 67 mm
Net weight	1.7 kg
Case	Die-cast aluminium, potted
Cable entry	Sealed glands

All dimensions in millimetres, taken from the drawing. Drawings are not to scale.

PROTECTION FUNCTIONS

Burnout	Load is reduced above the temperature limit; above 65 °C ambient the charger stops and goes to standby until cooled.
Reverse connection	Circuit shuts down with the battery if connected in reverse, without damaging the charger.
No-load	No output when no battery is connected.
Short circuit	Shuts down on an output short circuit; charging resumes only after the fault is cleared and a restart.
Full charge	Charging turns off automatically once the battery is judged full.

Typical use: bumper cars · walk-behind mowers · forklifts · floor scrubbers · AGVs · ships · sweepers · golf cars · aerial work platforms.