QA600A Series — 600 W Multi-Voltage Golf Cart Battery Charger

Aluminium-cased charger in six models from 12 V to 72 V packs, with per-chemistry charge voltages, 3-stage CC / CV / float charging and sealed cable-gland leads.

KEY FEATURES

- **Six models** — VT-QA600A-12 to -72, for 12 V to 72 V battery packs
- **Per-chemistry setpoints** — lead-acid, Li-ion and $LiFePO_4$ on every model
- **Constant current 5 A to 20 A**, matched to pack capacity
- **3-stage charging**: constant current, constant voltage, then float / trickle
- **≥90 % efficiency** at full-capacity load
- Protection: over-voltage, over-current, over-temperature, short circuit, reverse polarity
- LED status: red < 80 % · yellow > 80 % · green = fully charged
- Aluminium alloy case, **2.24 kg**

CHARGE VOLTAGE AND CURRENT BY MODEL

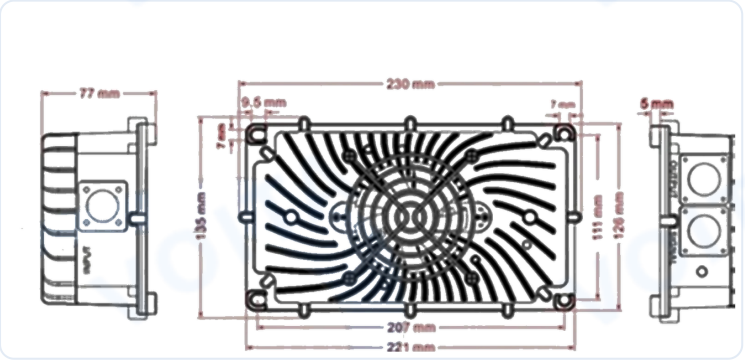
Model	CV, lead-acid	CV, Li-ion	CV, $LiFePO_4$	Constant current (A)	Cut-off, lead-acid (A)	Cut-off, Li (A)
VT-QA600A-12	14.7 V	16.8 V	14.6 V	20	4.0	1.00
VT-QA600A-24	29.4 V	29.4 V	29.2 V	15	3.0	0.75
VT-QA600A-36	44.1 V	42.0 V	43.8 V	10	2.0	0.50
VT-QA600A-48	58.8 V	54.6 V	58.4 V	8	1.6	0.40
VT-QA600A-60	73.5 V	67.2 V	73.0 V	6	1.2	0.30
VT-QA600A-72	88.2 V	84.0 V	87.6 V	5	1.0	0.25

CV = constant-voltage (voltage-limiting) setpoint. All six models share a 2.24 kg case and the same charging algorithm; only voltage setpoints and current ratings change.

GENERAL SPECIFICATION

Model series	QA600A — six models, VT-QA600A-12 to VT-QA600A-72
Battery voltage variants	12 V / 24 V / 36 V / 48 V / 60 V / 72 V
Rated output power	600 W platform rating
Charging mode	3-stage: constant current, constant voltage, then float / trickle
Efficiency	≥ 90 % at full-capacity load
Status indication	LED: red < 80 % · yellow > 80 % · green = fully charged
Protection	Over-voltage, over-current, over-temperature, short circuit, reverse polarity
Case	Aluminium alloy, finned
Cable entry	Sealed glands — input and output leads
Net weight	2.24 kg
Warranty	2 years standard, extendable by agreement

DIMENSIONS



Overall length	230 mm
Overall width	135 mm
Case thickness	77 mm
Length over mounting bosses	221 mm
Body length	207 mm
Net weight	2.24 kg

Dimensions in millimetres, taken from the drawing: 230 mm and 135 mm are the outer limits, 221 mm and 207 mm the body dimensions inboard of the mounting bosses, 77 mm the case thickness in the end view. Drawings are not to scale.

TYPICAL APPLICATIONS

E-motorcycles · electric wheelchairs · golf carts