

ARMORCELL · CIGS THIN-FILM SOLAR KIT

ARMORCELL 160 DUAL

320

WATTS

Two 160 W panels wired in series or parallel for 320 W of adhesive-mount power—the highest output ARMORCELL array on a single controller.

BUILT TO LAST

IP68 SEALED

WALKABLE

IK10 IMPACT

5" BEND RADIUS

-40°F TO +185°F

OPERATING POINT

38.8 V / 8.31 A

PANEL SIZE

2 × 67.3 × 26.2 in

PANEL WEIGHT

12.0 lb (5.4 kg)

MOUNTING

Self-adhesive

ELECTRICAL — AT STC

Peak power (Pmax)	320 W
Voltage at Pmax (Vmp) — series	38.8 V
Current at Pmax (Imp) — series	8.31 A
Open-circuit voltage (Voc) — series	48.2 V
Short-circuit current (Isc) — series	9.32 A
Technology	CIGS thin-film
Maximum system voltage	1000 VDC
NOCT	113 ± 35°F
Operating temperature	-40°F to +185°F
Series fuse rating	10 A
Power tolerance	±5%
Fire class	Class A
Connectors	MC4
Wire lead length	130 mm pos / 240 mm neg (each)
Mounting	Self-adhesive backing

STC: 1000 W/m², cell temperature 77°F (25°C), AM 1.5. Power tolerance ±5%. Temperature coefficient of Pmax -0.36%/°C.

PANEL OUTLINE



KIT CONTENTS

- 2 × ARMORCELL 160 panel, self-adhesive backing
- Victron SmartSolar 100|30 MPPT charge controller, Bluetooth
- Roof wire gland, 2 runs of 15 ft 6 mm² PV wire with MC4 bulkheads
- 2 × 10 A inline MC4 fuse — one per panel
- MC4 branch connectors for series or parallel combining
- 40 A marine-style circuit breaker
- Installation hardware — screws, grommet, pad

INCLUDED CHARGE CONTROLLER

Victron SmartSolar 100|30

Charge algorithm	MPPT
Max PV input voltage	100 V
Max charge current	30 A
Battery voltage	12 V / 24 V auto
Max PV power (12 V)	440 W
Bluetooth	Built-in

SYSTEM WIRING



Each panel gets its own 10 A inline fuse ahead of the roof gland. Inside the vehicle the two runs combine in series (38.8 V / 8.31 A) or parallel (19.4 V / 16.6 A) — both inside the 100|30 window.

APPLICATIONS

EMS · Fire · Police

Marine

Construction & Ag

Outdoor

KIT SKU

SK160DUAL-ACV

PANEL PART NO.

2 × SP160-AC

WARRANTY

5 years

DOCS & DOWNLOADS
chargesys.solar/support

