OUTDOOR SOLAR MICROGRID CABINET

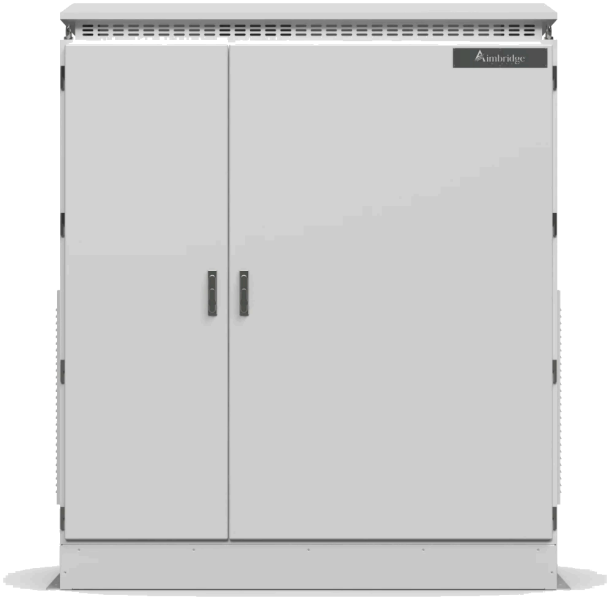
PowerCor™ 25

Outdoor solar microgrid power for resilient site infrastructure.

PowerCor™ 25 is a factory-integrated outdoor solar microgrid cabinet built around the EG4 FlexBOSS21 hybrid inverter. It combines up to a 25 kW PV array, 21 kW utilized, across three MPPT trackers, 12 kW of continuous output on battery (16 kW with PV and grid), and remote monitoring in one outdoor enclosure designed to NEMA Type 3R.

PowerCor™ 25 runs off-grid or utility-connected, with non-export or grid-export operation selectable at commissioning, at 120/240 VAC split-phase or 120/208 VAC. An external 48 V battery is sold separately.

Product page & documents
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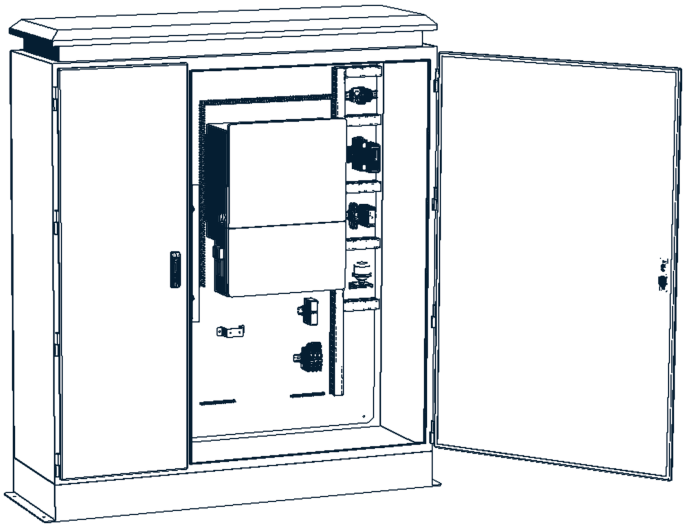


12 kW	21 kW	120/240 or 120/208 VAC	48 VDC
CONTINUOUS OUTPUT (BATTERY)	MAX UTILIZED PV	AC OUTPUT	EXTERNAL BATTERY

KEY FEATURES

- EG4 FlexBOSS21 hybrid inverter: 12 kW continuous on battery, 16 kW with PV and grid
- Three MPPT trackers: up to 25 kW PV array, 21 kW utilized; 550 VOC max
- 120/240 VAC split-phase or 120/208 VAC, 60 Hz, set at commissioning
- Off-grid or utility-connected; non-export or grid export selectable at commissioning
- PV disconnect, rapid-shutdown transmitter, AFCI, and ground-fault monitoring built into the inverter
- Remote monitoring through the EG4 cloud
- Welded aluminum cabinet designed to NEMA Type 3R, with 19-in equipment racks on the left-hand side
- Options: battery combiner busbar, factory-wired 12-circuit AC load center with plug-on neutral, and Aimbridge site controller for remote monitoring

INTERIOR LAYOUT



Right-hand door open: inverter and DIN-rail protection in the main bay. 19-in equipment racks are on the left-hand side.

TECHNICAL SPECIFICATIONS

Specifications are typical at 77 °F (25 °C), nominal input voltage, and rated load unless otherwise noted.

SYSTEM & AC POWER

System type	Factory-integrated solar, battery, AC/DC power conversion and distribution
Factory configurations	120/240 VAC split-phase or 120/208 VAC, set at commissioning
Operating modes	Off-grid; utility-connected, non-export or grid-interactive (export), selectable at commissioning
Hybrid inverter	EG4 FlexBOSS21 (IV-16000-HYB-AW-FX-02)
Continuous output, 120/240 VAC	12 kW (50 A) battery only; 16 kW (66.7 A) with PV and grid at 77 °F (25 °C)
Continuous output, 120/208 VAC	50 A battery only; 66.7 A with PV and grid
Continuous output per leg	50 A (6 kW)
Peak power	24 kW (0.5 s); 18 kW (1 s); 15 kW (6 min); 13.2 kW (12 min)
AC output	120/240 VAC or 120/208 VAC, 60 Hz
AC output protection	90 A 2-pole breaker; Type 1 surge protective device
AC input (grid)	90 A grid pass-through; 50 A (12 kW) grid input to inverter

CONTROLS & OUTPUTS

AC distribution	Optional factory-wired 12-circuit AC load center with plug-on neutral
Energy management	Self-consumption, peak shaving, PV charge priority, export limiting
Monitoring	EG4 cloud monitoring via Wi-Fi; optional Aimbridge site controller for remote monitoring
Grounding	Per the EG4 FlexBOSS21 manual; the cabinet adds no neutral-ground or DC bonds. Equipment is grounded to the chassis per NEC.
Neutral-ground bond	Common neutral; the inverter does not bond neutral to ground.

COMMUNICATIONS

Battery communication	CAN / RS485; closed-loop BMS communication
Wi-Fi	EG4 Wi-Fi dongle for EG4 cloud remote monitoring
Site controller	Optional Aimbridge controller with Ethernet switch for Aimbridge remote monitoring

PV & BATTERY

Maximum utilized PV power	21 kW
Recommended maximum PV array	25 kW
MPPT trackers	3; 2 / 2 / 1 strings (5 total)
MPPT voltage range	120–440 VDC operating; 250–440 VDC full power
PV startup voltage	200 VDC
Maximum PV voltage	600 VDC maximum DC input; high-voltage protection trips at 550 VDC
String sizing	String voltage must not exceed 600 VDC at the coldest expected site temperature; size strings to the 250–440 VDC full-power range
Maximum PV input current	26 / 26 / 15 A per tracker
PV short-circuit current	31 / 31 / 19 A max per tracker
External PV equipment	Field-supplied array disconnects and Tigo-compatible rapid-shutdown receivers; PV disconnect, RSD transmitter, AFCI, and ground-fault monitoring included in the inverter
Battery system	External 48 VDC managed battery, sold separately; lug connection through conduit; optional battery combiner busbar
Battery compatibility	EG4 batteries and EG4-listed third-party batteries; closed-loop communication over CAN or RS485
Battery voltage	51.2 VDC nominal; 40–60 VDC operating
Battery charge / discharge current	250 A max charge; 250 A max discharge
Recommended battery capacity	600 Ah minimum
Battery protection	300 A battery breaker in the inverter

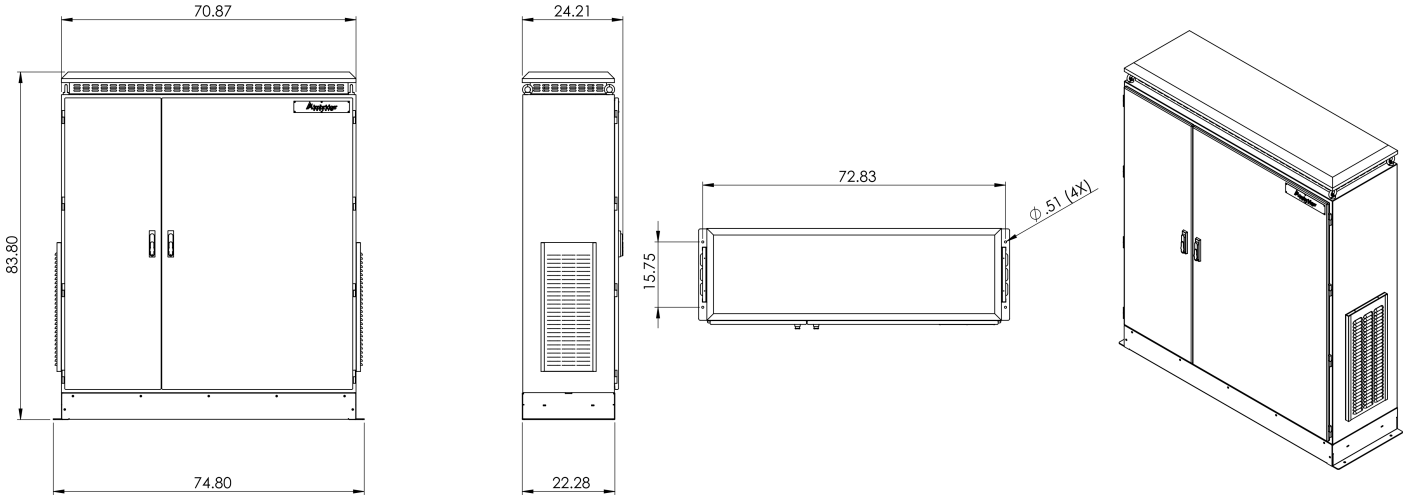
ENCLOSURE & ENVIRONMENTAL

Enclosure	Outdoor equipment cabinet designed to NEMA Type 3R
Construction	Welded 0.12 in (3 mm) aluminum; white powder coat; stainless-steel hardware
Included features	Double doors, 3-point locks, 19-in equipment racks (left-hand side), thermostat-controlled fans, filters, rain hoods, gland plates, lifting eyes
Operating temperature	−13 to +122 °F (−25 to +50 °C)

Final ratings are governed by the certified configuration, installed battery BMS limits, branch protection, and ambient temperature.

DIMENSIONS

OUTLINE DIMENSIONS



KEY DIMENSIONS & WEIGHTS	
External (H × W × D)	83.80 × 70.87 × 24.21 in (2129 × 1800 × 615 mm)
Base flange	74.80 in (1900 mm) wide
Weight	550–570 lb (249–259 kg), varies by configuration
Cabinet body depth	22.28 in (566 mm), excluding doors and handles
Anchor holes	4 × Ø0.51 in (13 mm), 72.83 × 15.75 in pattern

Dimensions are nominal, in inches (mm). Overall depth includes doors and handles.

PART NUMBERS

PART NUMBER	DESCRIPTION	RATING
016-3700-10	PowerCor™ 25, EG4 FlexBOSS21	12 kW / 21 kW PV
016-3701-10	PowerCor™ 25, EG4 FlexBOSS21, battery combiner busbar, AC load center, site controller	12 kW / 21 kW PV
016-3702-10	PowerCor™ 25, EG4 FlexBOSS21, battery combiner busbar	12 kW / 21 kW PV
016-3703-10	PowerCor™ 25, EG4 FlexBOSS21, AC load center	12 kW / 21 kW PV
016-3704-10	PowerCor™ 25, EG4 FlexBOSS21, battery combiner busbar, AC load center	12 kW / 21 kW PV

STANDARDS & COMPLIANCE

CATEGORY	EQUIPMENT / SCOPE	STANDARDS	STATUS
Safety	EG4 FlexBOSS21 inverter	UL 1741 (SA, SB), IEEE 1547	Listed

REVISION HISTORY

REV.	DATE	DESCRIPTION OF CHANGE
A	November 2026	Initial release.

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