



EdgeOn Duo 15

SPLIT PHASE HYBRID INVERTER

OVERVIEW

Flexible Power. Smarter Design. Home.

The Fortress Power EdgeOn Duo 15 Split-Phase Hybrid Inverter is a high-performance solution for residential solar + storage applications. Designed to support high-power PV modules with up to 15,000W of input and equipped with three independent MPPTs (30A/22A/22A), it efficiently maximizes solar energy harvest across a wide operating range. This hybrid inverter supports both AC- and DC-coupled solar configurations and includes advanced protection features such as AFCI, rapid shutdown, and surge protection. With a seamless backup switchover time of under 10ms, it ensures uninterrupted power during outages. Compatible with both lithium and lead-acid batteries (40–64V), and capable of handling up to 210A charge/discharge current, the system also allows for scalable installations with support for up to 9 units. It's an adaptable and future-ready choice for homeowners aiming for greater energy independence.

FEATURES

Smart, Scalable Power for Everyday Resilience

Maximize Solar Output with 2 MPPTs

Designed to support high-power PV modules with up to 15,000W of input and equipped with three independent MPPTs (30A/22A/22A), it efficiently maximizes solar energy harvest across a wide operating range.

Fast, Seamless Backup Performance

Delivers continuous power with less than 10ms transfer time—ideal for protecting sensitive home electronics during outages.

Scalable for Whole-Home Energy

Stack up to 9 inverters in parallel to support larger homes or expand your system over time as energy needs grow.

Built-In Safety & Code Compliance

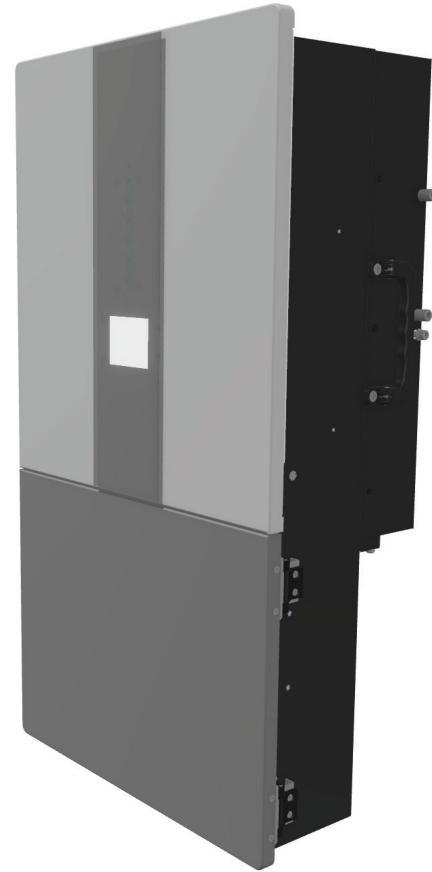
Integrated arc fault circuit interrupter (AFCI), rapid shutdown, and a DC breaker enhance system protection and meet NEC safety standards.

Flexible Power Modes with Time Control

Choose from four operating modes including off-grid, self-consumption, time-of-use, and backup—each programmable with advanced time scheduling.

Remote Monitoring & Updates

Configure, manage, and upgrade your system remotely with built-in connectivity—giving you full control from anywhere.



Applications

Backup	Off-Grid
Peak Shaving	Microgrid
Net Metering*	Smart Load

* with external meter

Specifications

- Rated Output Power: 10,000W
- Max. Output Power: 11,400W
- Rated Output Voltage: 120/240V (Split-phase) / 208V (2/3 phase)
- Frequency: 50/60Hz
- Battery Voltage Range: 40–64V
- Max. Input Short Circuit Current: 40A/30A/30A
- No. of MPPT: 3

TECHNICAL DATA

Precision-Engineered Specifications for Optimal Performance

INPUT (PV)	
Max PV Input Power	15,000W
Max PV Voltage	600V
Start-up Voltage	90V
MPPT Operating Voltage Range	70V-540V
Max. Input Current per MPPT	30A/22A/22A
Max short current per MPPT	40A/30A/30A
String per MPPT	2/2/2
Nos. of MPPT	3
INPUT/OUTPUT (BAT)	
Battery Type	Lithium-ion/Lead-acid
Nominal Battery Voltage	48V
Battery Voltage Range	40V-64V
Max. Charge/Discharge Current	210A/210A
Max. Charge/Discharge Power	10,000W/10,000W
OUTPUT (GRID)	
Nominal AC Output Power	10,000W
Max. AC Output Apparent Power	11,400VA
Max. AC Output Power (PF=1)	11,400W
Nominal AC Output Current	41.7A
Max. AC Output Current	47.5A
Nominal Grid Voltage	120V/240V (Split phase) / 208V (2/3 phase)
Nominal Grid Frequency	50Hz/60Hz
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)
THDI	<3% (Rated Power)
OUTPUT (BACKUP)	
Nominal Output Power	10,000W
Nominal AC Output Power (PF=1)	11,400W
Nominal Output Current	41.7A
Peak Power (1s)	20,000VA
Nominal Output Voltage	120V/240V (Split phase)/208V (2/3 phase)
Nominal Output Frequency	50Hz/60Hz
Transfer Time	<10ms (typical)
THDV	<3% @100% R Load
EFFICIENCY	
Max. Efficency (PV to AC)	98.0%
Max Efficiency (BAT to AC)	94.5%
CEC. Efficiency	96.5%

PROTECTION	
Protection Category	Class I
DC Switch	Yes
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC/AC Overvoltage Protection	DC Type II, AC Type IV
AC Short Circuit Protection	Yes
DC Reverse Protection	Yes
Surge Arrester	DC Type II, AC Type II
Insulation Resistence Detection	Yes
Leakage Current Protection	Yes
AFCI	Yes
RSD	Yes
Generator	Yes
GENERAL	
Max. Operation Altitude	2000m*
Ingress Protection Degree	NEMA 3R
Operating Temperature Range	-25°C~60°C (>45°C derating)
Relative Humidity	0~100%
Cooling Method	Fan Cooling
Mounting	Wall bracket
Dimensions (W*H*D)	16.5*31.5*9.4 inch (420mm*800mm*240mm)
Weight	40Kg/88lb
PV Connection Way	Terminals
HMI & COM	
Display	Wireless & APP + LED, LCD (optional)
Communication Interface	CAN (for BMS), DR/RS485 (for meter), RS485, Optional: Wi-Fi/LAN
CERTIFICATION	
Safety	UL 1741/CSA C22.2/UL 1699B
Grid	UL1741SB, IEEE1547: 2018, HECO SRD 2.0
EMC	FCC Part 15 Class B
Warranty	10 Years

* Information subject to change.