

ZOLA EDGE ENERGY MANAGEMENT SYSTEM



Scalable Service up to 25kVA / 53kWh

With parallel stacking of 5kVA INVERTER and 5.3kWh BACKUP
Batteries and INVERTERs can be scaled independently



Automated & Optimized Power Management

Supports multiple power sources (solar, grid, generator)
Data driven power source selection for battery charging and load support



Remote Monitoring, Management & Troubleshooting

Universal GSM data connection
Web app for fleet level management
Mobile app for system level monitoring
Pay-As-You-Go and Power-As-A-Service support



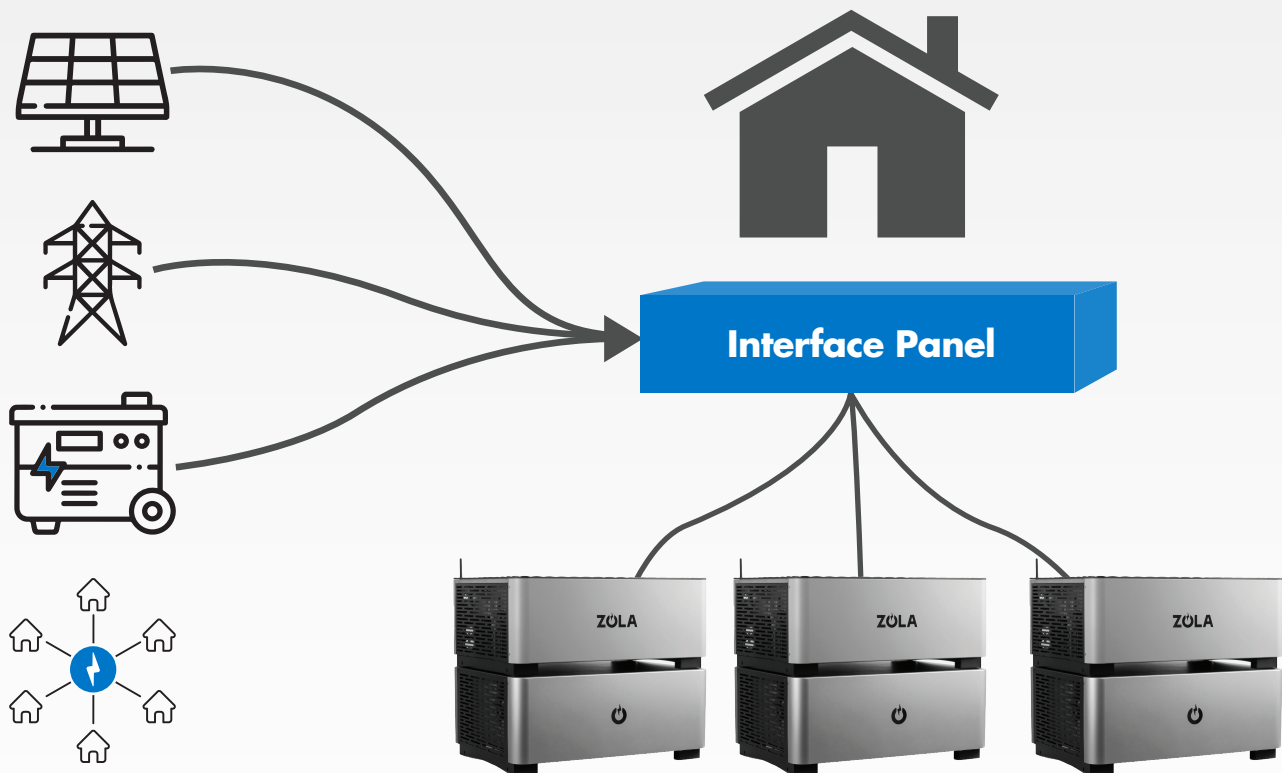
Easy Installation & Maintenance

With components that are integrated plug & play and field swappable

ZOLA EDGE VALUE PROPOSITION

An intelligent modular power solution that integrates with multiple power sources (solar, grid, generator) to deliver uninterrupted power at the lowest cost and designed to solve energy access problems.

PROPOSED SOLUTION



CORE VALUE: RELIABILITY

Reliable and affordable electricity to the **End users**

Support for numerous commercial applications for **Integrators-Distributors**

Fleet monitoring and management web app with analytics for **Integrators-Distributors**

COMPETITIVE ADVANTAGE: INTELLIGENCE

Advanced Power Management supporting best user experience and highest reliability for **End Users**

Easy Installation with integrated components & modular architecture for **Integrators-Distributors**

3rd Party Ownership with for **PAYGO** and **PAAS** revenue model support for **End users & Financial Institution**

EDGE INVERTER & BACKUP SPECIFICATIONS

Type	EDGE
Rated Power per INVERTER	5 kVA
Output type	AC, single-phase
Scalability of INVERTER	Single Phase: 1-5 units (5 kVA-25 kVA)
Rated Storage Capacity per BACKUP	Nominal: 5.3kWh ; Usable: 4.8 kWh
Scalability of BACKUP	Up to 10 Units (Nominal: 53kWh / Usable: 48kWh)
AC input	
Acceptable voltage range	180 - 270 V RMS
Frequency	50 / 60 Hz
Maximum AC input current	40 A RMS
DC input (Solar PV)	
Type	Maximum Power Point Tracking
Number of arrays per inverter	1
Maximum PV array power per inverter	6,500W
MPPT Range @ Operating Voltage	120 - 430 V
Maximum PV array Open Circuit Voltage	450V
Maximum PV array current per inverter	26 A
Output	
Voltage range	230 V RMS +/- 5%
Surge capacity	7.5 kVA for 10 seconds, 10 kVA for 5 seconds, >10kVA for 0.1 seconds
Efficiency (Peak)	90% Efficiency
Transfer Time	Single inverter: less than 20ms
Waveform	Pure sine wave
No load power consumption	<60W

Battery module (BACKUP)	
Voltage	48V
Floating Charge Voltage	56V
Overcharge Protection	57.5V
Maximum discharge current	150 A per battery
Maximum charge current	30 A per battery
Cycle life at 80% capacity retention	2000 cycles at 100% depth of discharge.
Battery Chemistry	LiFePO4
Battery charging	
Maximum charge current from the PV input	80A per inverter, limited to a total 30A per battery
Maximum charge current from the AC input	50A per inverter, limited to a total 30A per battery
Physical	
Inverter Dimension (W x H x D)	600mm x 245mm x 450mm
Inverter Weight (kgs)	22kg
Battery Dimension (W x H x D)	600mm x 302mm x 450mm
Battery Weight (kgs)	56kg
Communication Interface	USB / RS232 / RS485 / GSM / WiFi
Operating Environment	
Humidity	20% to 80%
Operation Temperature	5°C to 45°C
Storage Temperature	-20°C to 25°C for up to 18 months
Safety Compliance	IEC 62109, IEC 62619, UN 38.3, EN 61000, EN 300 328, EN 301 511, EN 62311