

Evoltix Zero-Glitch Power Module (ZPM)[™] vs. Uninterruptible Power Supply (UPS) vs. DC Power System



	ZPM	UPS*	DC
Primary Function: Backup Power During Outages	✓	✓	✓
Primary Function: Smart Energy Management	✓	✗	✗
Automated Alarms and Alerts with Dry Contacts	✓	✗	✗
Battery-First Architecture	✓	✗	✓
Battery Technology: Lithium-ion	✓	✗	✗
Up to 15-year Battery Lifespan	✓	✗	✗
Clean, Maintenance-free Batteries	✓	✗	✗
No Ventilation Needed for Battery Off-gassing	✓	✗	✗
DC Distribution with Circuit Protection	✓	✗	✓
Provides Backed-up AC Power	✓	✓	✗
Optimizes External Power Sources	✓	✗	✓
Integrates Renewable Energy Sources	✓	✗	**
Multiple Inputs & Outputs	✓	✗	✓
Real-Time Remote Monitoring & Control	✓	✓	✗
Operates as Microgrid Controller	✓	✗	✗
Offers Advanced Diagnostics & Upgrades	✓	✗	✗
Sustainable Design for CO2 Reduction	✓	✗	✗
Scalable and Flexible (N+1 Redundancy)	✓	✓	✓
Indepth Remote Access	✓	✗	✗
Fully Integrated Solution	✓	✗	✗
Completely Preintegrated Solution	✓	✗	✗
Comprehensive View of Components	✓	✗	✗
Managed by an Edge Server	✓	✗	✗
Predictive with Machine Learning	✓	✗	✗

*Comparison of Evoltix ZPM to Liebert Nfinity Series UPS and Eaton Ferrups Series UPS.

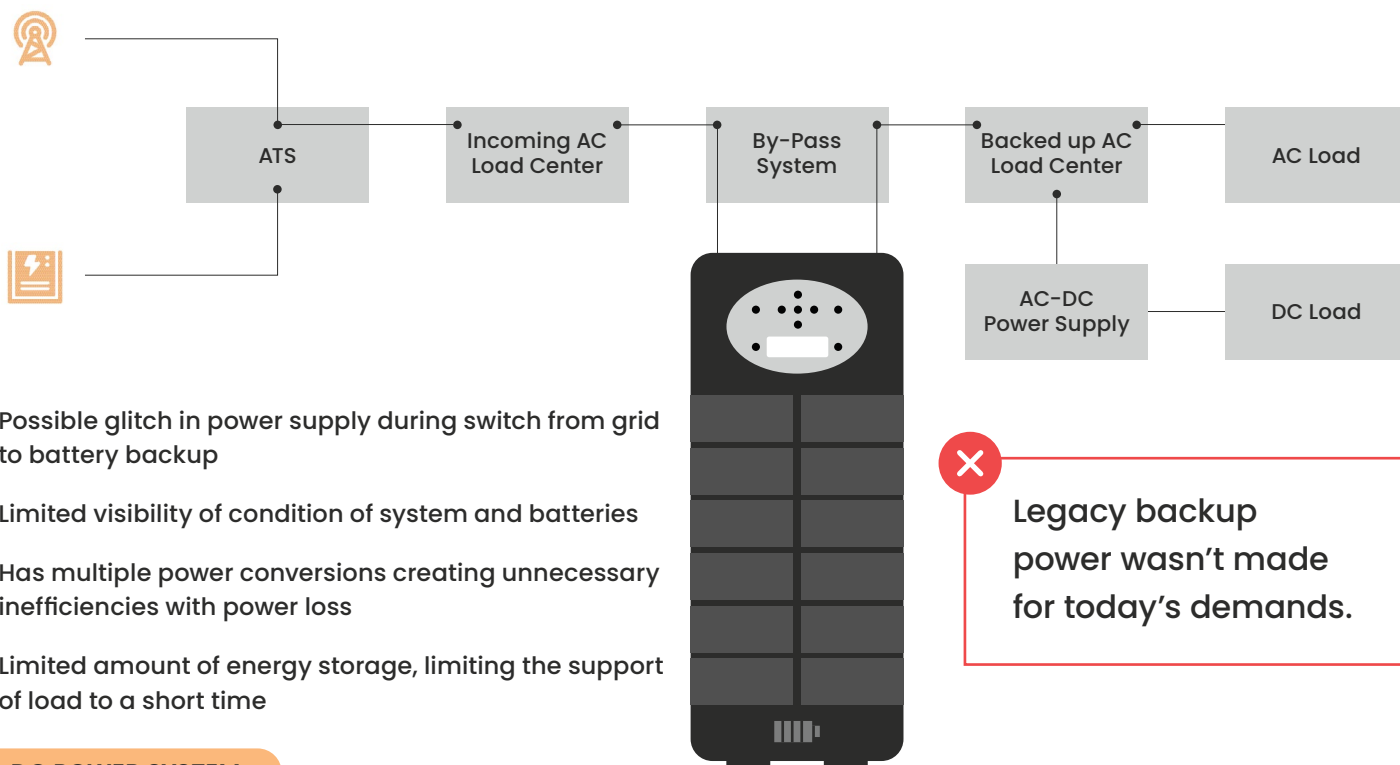
**Possible / Partial - Integrating Renewables onto the DC bus is possible, integration of controls, including status and data is not

Evoltix ZPM:

From Backup to Always-on Assurance.

LEGACY BACKUP POWER SYSTEMS

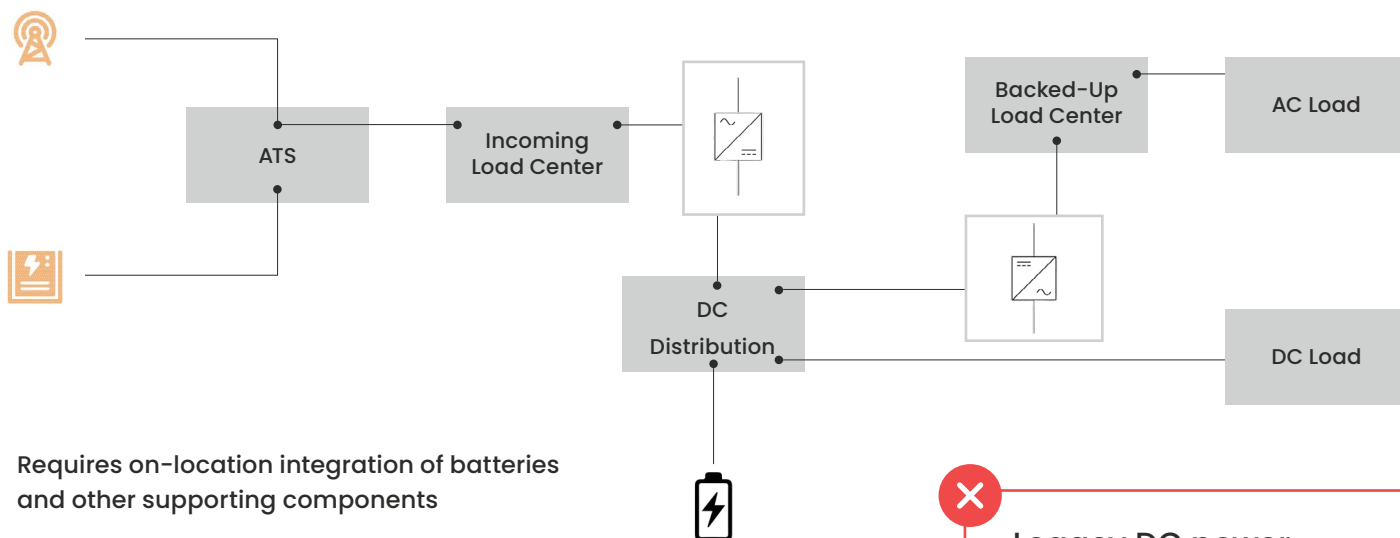
UPS SYSTEM



- Possible glitch in power supply during switch from grid to battery backup
- Limited visibility of condition of system and batteries
- Has multiple power conversions creating unnecessary inefficiencies with power loss
- Limited amount of energy storage, limiting the support of load to a short time

Legacy backup power wasn't made for today's demands.

DC POWER SYSTEM



- Requires on-location integration of batteries and other supporting components
- Limited or Fragmented visibility of condition of system, additional components and batteries
- Only supplies DC power, AC powered equipment will require secondary power conversion equipment

Legacy DC power plants weren't built for today's demands.

Evoltix ZPM:

From Backup to Always-on Assurance.

EVOLTIX ZERO-GLITCH POWER MODULE (ZPM)

ZPM SYSTEM

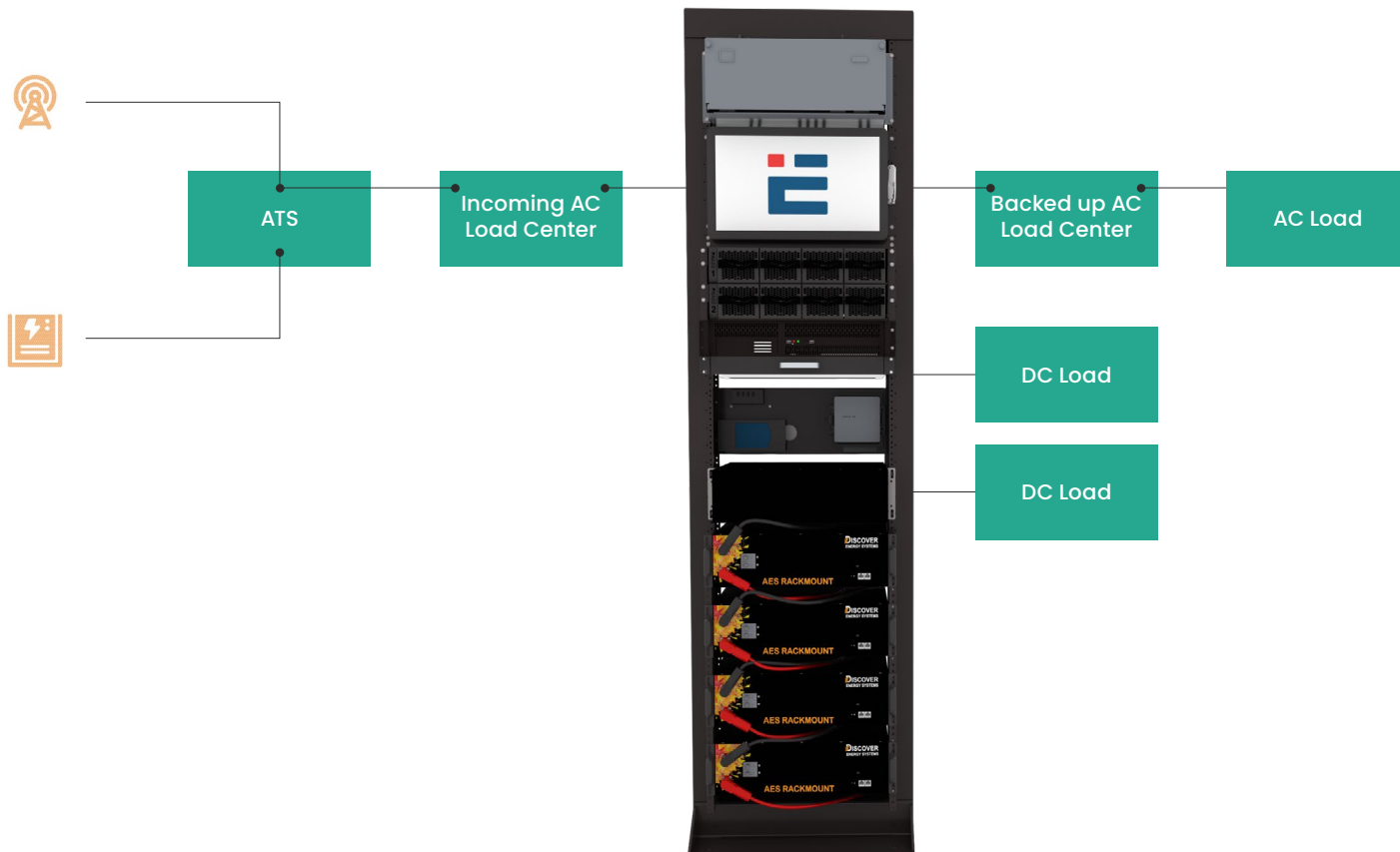
- ✓ Full system visibility, on site or remotely:
 - Condition of batteries
 - Power conversion
 - Grid status
 - Renewables (when applicable)
 - Automated alarms and alerts/dry contacts
- ✓ Energy storage up to 102.6 kWh available to support the load for as long as necessary
- ✓ Limited number of power conversions
- ✓ Fully managed DC distribution with up to 14 available connection points



When a customer's UPS-backed sites failed, I turned to [Evoltix's] Zero-glitch Power Module. With its integrated batteries and remote monitoring, it's in a league of it's own.

ERNIE MILLER

Owner & Operator
Midwest Mobile Radio



Get More Backup Time with the ZPM

Legacy UPS systems were designed to bridge brief interruptions. The ZPM is engineered to sustain operations through extended outages, delivering dramatically longer runtime, greater resilience, and fewer operational surprises.

Standard ZPM Models Serviceable Loads & Backup Time				
		ZPM Model		
		ZPM 1	ZPM 2	ZPM 3*
Serviceable Loads (kW)		≤4.5	4.5–9	9–13.5
Conversion (kW)		9	13.5	18
Inverter Modules		4	6	8
Max Current Amps @ 48VDC		93.75	187.5	281.25
Max Current Amps @ 240VAC		18.75	37.5	56.25
Energy Storage Ah @ 48VDC		200	400	600
Critical Load		Hours of Backup	Hours of Backup	Hours of Backup
kW	Amps @48VDC			
0.5	10.42	15.36	30.72	43.08
1	20.83	7.68	15.36	23.04
1.5	31.25	5.12	10.24	15.36
2	41.6752.08	3.84	7.68	11.52
2.5	62.50	3.07	6.14	9.22
3	72.92	2.56	5.12	7.68
3.5	9	2.19	4.39	6.58
4	83.33	1.92	3.84	5.76
4.5	93.75	1.71	3.41	5.12
5	104.17		3.07	4.61
5.5	114.58		2.79	4.19
6	125.00		2.56	3.84
6.5	135.42		2.36	3.54
7	145.83		2.19	3.29
7.5	156.25		2.05	3.07
8	166.67		1.92	2.88
8.5	177.08		1.81	2.71
9	187.50		1.71	2.56
9.5	197.92			2.43
10	208.33			2.30
10.5	218.75			2.19
11	229.17			2.09
11.5	239.58			2.00
12	250.00			1.92
12.5	260.42			1.84
13	270.83			1.77
13.5	281.25			1.71

* In development

Learn more at evoltixenergy.com.