



Predictable, continuous and efficient power systems engineered for organizations with zero tolerance for downtime. All Z Series systems are built on a Megawatt frame.



# Multi-Module Systems **CLEANSOURCE® UPS** 1200 Z-Frame

battery-free energy storage

high reliability

60

98%

130 150  
efficiency

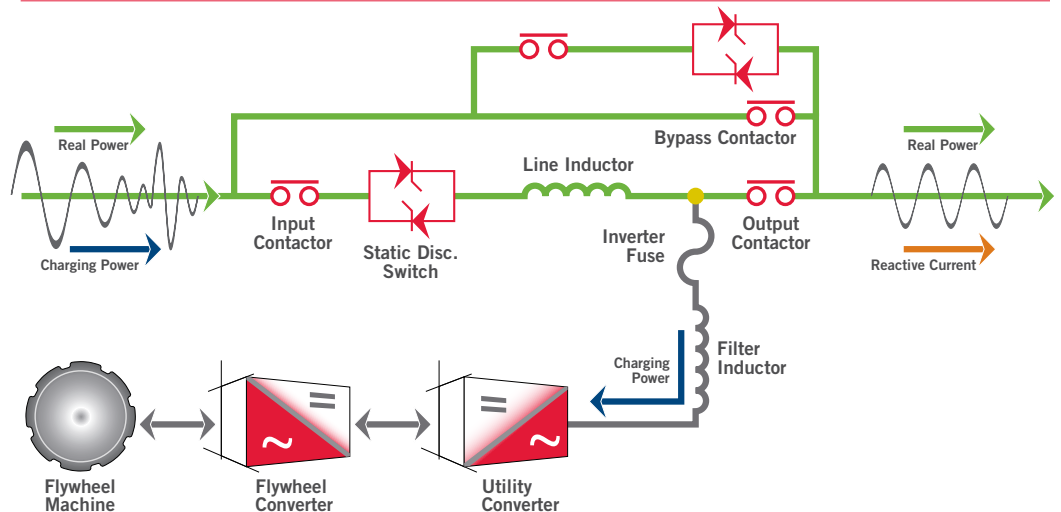
300 - 600 - 900 - 1200  
kVA

480  
V

## SYSTEM FEATURES

- Rugged, on-line and fault-tolerant UPS
- Most efficient UPS architecture
- Handles multi-load characteristics
- Cost-effective lifecycle cost
- Modular and redundant architecture
- Predictable flywheel energy storage
- 20-year design life
- Low service and maintenance requirements
- Smallest available footprint
- Rapid recharge time
- Predictive failure analysis
- Wide operating temperature range
- Remote and local monitoring
- Quiet operation
- Fault compartmentalization
- Simple and cost-effective installation
- Multi-vendor generator and switchgear compatibility
- Field-proven reliability
- No hazardous waste material

## PARALLEL ONLINE ARCHITECTURE



intelligently  
**EFFICIENT**

inherently  
**RELIABLE**

economically  
**GREEN**



**STANDARD RIDE-THROUGH**

Load%	Time
100%	14 seconds
75%	19 seconds
50%	28 seconds
25%	52 seconds

**FACTORY INSTALLED EQUIPMENT**

**Standard**

- CSView™ – advanced real-time monitoring
- IGBT-based UPS technology
- Flywheel energy storage
- Superior power conditioning
- High-speed voltage regulation
- High overload capacity
- Static bypass circuit
- User-friendly control panel
- Redundant cooling fans
- Redundant control power
- Power factor correction
- Intelligent self-diagnostics
- Serial connections
- Back-feed protection
- Harmonic cancellation

**Optional**

- Remote SNMP/MODBUS monitoring capability
- Remote status panel
- Seismic provisions
- Separate bypass input
- Redundant flywheel and UPS
- Upgrade and parallel capability to 8,800kVA
- External synchronization input
- GenSTART™ Generator Start Power

**PRODUCT SPECIFICATIONS**

MODEL	UPS 300EZ	UPS 600Z	UPS 900Z	UPS 1200Z
<b>RATING</b>				
Maximum kVA	300	600	900	1200
Maximum kW	240	480	720	960

<b>INPUT</b>				
Voltage <sup>1</sup>	480 VAC 3-phase, 3-wire plus ground			
Voltage Range	+10% / -15% (programmable)			
Frequency	60 Hz +/- 10% maximum (programmable) +/- 3% (default)			
Power Factor	0.99 at rated load and nominal voltage			
<b>Harmonic Current Distortion</b>				
Linear Load	<3% at 100% load			
Non-Linear Load	<8% at 100% load			
Current - Nominal (480 VAC)	302	599	898	1,198
Current - Max. Continuous	400	800	1,200	1,600
Current - Max. Non-Continuous	420	840	1,260	1,680
Surge Withstand	Meets IEEE 587/ANSI C62.41			
Walk-In	1 to 15 seconds (programmable)			

<b>OUTPUT</b>				
Voltage <sup>1</sup>	480 VAC 3-phase, 3-wire plus ground			
<b>Voltage regulation</b>				
Steady state	+/-1% for +/-10% input			
Flywheel mode	+/-1% steady state			
Transient	+/-1% within 50 mSec for 100% load step			
Voltage distortion <sup>2</sup>	<3% linear loads and <5% for 100% non-linear loads <sup>2</sup>			
Frequency	60Hz (mains synchronized) (normal operation +/- 0.2% free running)			
Slew Rate	Adjustable from 0.2Hz/second to 3.0Hz/second			
Current - Nominal (480 VAC)	361	723	1,084	1,445
Overload Capability-Mains Operation	Continuous Up to 105%	10 Min 125%	2 Min 150%	30 Sec 200% 10 mSec >200%
UPS Efficiency <sup>4</sup>	97%		98%	

<b>Environmental</b>				
Audible Noise	<72 dBA at 1 meter		<75 dBA at 1 meter	
<b>Temperature</b>				
Operating	32 to 104° F 0 to 40° C			
Storage	-13 to 158° F -25 to 70° C			
Humidity	5% to 95% (non-condensing)			
Altitude <sup>3</sup>	Up to 3,000 feet Up to 914 meter			
Emissions and Immunity	FCC Class A, Subpart J of Part 15/ EN 50091-2			
<b>Heat Rejection<sup>5</sup></b>				
kW	8.7	12.3	18.4	24.6
BTU/Hr	29,612	41,983	62,975	83,967

<b>PHYSICAL DATA</b>				
Height (w/o wireway or DC bus)	96.0 in 2,438 mm	96.0 in 2,438 mm	96.0 in 2,438 mm	96.0 in 2,438 mm
Width	127.0 in 3,226 mm	170.0 in 4,318 mm	213.0 in 5,410 mm	256.0 in 6,502 mm
Depth	34.0 in 865 mm	34.0 in 865 mm	34.0 in 865 mm	34.0 in 865 mm
Weight	6,750 lbs 3,063 kg	11,250 lbs 5,103 kg	15,750 lbs 7,144 kg	20,250 lbs 9,185 kg
Cable Entry	Top or Bottom			
Safety	UL 1778 Listed CUL CAN/CSA 22.2 No. 107.1 Listed			

<sup>1</sup> Optional 4-wire  
<sup>2</sup> EN59001-3  
<sup>3</sup> Derate operating temperature for higher elevations  
<sup>4</sup> DC energy storage offline  
<sup>5</sup> DC energy storage online

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