FT·N Powerware

Powerware® 9315-750

Product Focus

Model 625, 625 kVA/ 562 kW/ 500 kW Model 750, 750 kVA/ 675 kW/ 600 kW



Features

- High-power IGBTs deliver superior output voltage regulation, tight output frequency regulation, and minimum output voltage THD — combined with high-speed switching, true pulse-width modulation (PWM) control of the inverter output produces a pristine output waveform
- The highly reliable internal Controller Area Network (CAN) communications network provides seamless integration of peripherals and options from the control panel
- · Prioritized cooling of components
- Power management software compatibility
 - PowerVision®, LanSafe®, FORESEER®
 - Software Suite CD is bundled with the UPS
- · Connectivity options
 - ConnectUPS-X Web Card, Modbus Card, Single Port Serial Card - Environmental Monitoring Probe for ambient temperature and
 - humidity monitoring (requires the Web Card option) - Expansion Chassis available for increased communications
 - capabilities

Eaton has redefined availability in the power protection industry. The combination of the Powerware 9315 with Powerware Hot Sync® paralleling technology delivers the most reliable system available, providing you with the knowledge that your equipment is protected to the greatest degree possible. With more than 40 years of experience designing and building high-end, innovative UPS solutions, Eaton understands the need to deliver the ultimate in power protection and value.

System configurations:

- Single module-reverse transfer
- Multi-module-parallel for capacity/redundancy
- Powerware Sync Control
- Isolated redundant

Accessories include:

- Remote monitor panel
- Supervisory contact module
- Relay interface module

Standard features:

- Input isolation transformer
- High efficiency-up to 92%
- High-speed IGBT PWM inverter
- Powerware Hot Sync wireless paralleling capability
- Large LCD monitor panel
- Highly reliable, internal CAN communication network
- Communications panel with RS232 ports and building alarms

- 12-pulse rectifier
- Digital signal processing (DSP) control
- •Top cable entry
- Front access only required
- Washable air filters

Optional features:

- Intelligent input filter (5% THD)
- 0.9 output p.f.
- High AIC input circuit breaker rating
- Inrush current limiter
- Internal modem
- eNotify service
- PowerVision monitoring software
- Optional 7x24 modem or Web remote monitoring of 30+ UPS and battery alarms, heartbeat check and monthly report



Advanced communications

- Large easy-to-read LCD measures 191mm x 152mm (7.5" x 6")
- Push-button controls allow easy access to data through user-friendly interface
- Operational metering features:
- True RMS sensing of voltage and current
- Real-time display
- Displays up to 400 of the most recent events; all data is accessible via modem
- Intelligent alarm management event record separates informational notices from situations requiring operator intervention
- In addition to the LCD panel, LEDs indicate UPS operating status at a glance
- Unique system performance statistics include summary information on:
- UPS and bypass availability
- Frequency and length of on-battery conditions
- Building alarms
- -Time on bypass, and much more
- A hinged access cover protects an emergency power-off (EPO) button that quickly de-energizes the UPS and critical load

POWERWARE 9315-750 PERFORMANCE CHARACTERISTICS⁺

			Model 750				Model 625				
		750 kVA/600 kW		750 kVA/675 kW ¹		625 kVA/500 kW		625 kVA/562 kW ¹			
Input Voltage	Volts	480	600	480	600	480	600	480	600		
Output Voltage	Volts	480	600	480	600	480	600	480	600		
Input Voltage Range											
Minimum	Volts	408	510	408	510	408	510	408	510		
Maximum	Volts	528	660	528	660	528	660	528	660		
Input/Output Frequency	Hz	60	60	60	60	60	60	60	60		
AC Input											
Maximum Amps ²	Amps	1141	913	1181	945	951	761	984	787		
Bypass Input											
Nominal Amps	Amps	902	722	902	722	752	601	752	601		
AC Output											
Nominal Amps	Amps	902	722	902	722	752	601	752	601		
10 Minutes max.	Amps	1119	895	1119	895	932	746	932	746		
DC Link 192 Cell											
Nominal DC Voltage	Volts	384	384	384	384	384	384	384	384		
Float Voltage	Volts	432	432	432	432	432	432	432	432		
End of Discharge	Volts	320	320	320	320	320	320	320	320	-	
Nominal Amps	Amps	1662	1662	1870	1870	1385	1385	1557	1557		
DC Link 240 Cell											
Nominal DC Voltage	Volts	480	480	480	480	480	480	480	480		
Float Voltage	Volts	540	540	540	540	540	540	540	540		
End of Discharge	Volts	401	401	401	401	401	401	401	401		
Nominal Amps	Amps	1330	1330	1496	1496	1108	1108	1246	1246		
System Efficiencies (typical)											
@ 100% load	%	92	92	92	92	92	92	92	92		
@ 75% load	%	92	92	92	92	92	92	92	92		
@ 50% load	%	92	92	92	92	91	91	91	91		
Full Load Heat Dissipation											
BTU/Hr. (x1000)		130.8	130.8	173.5	173.5	109	109	144.6	144.6		
KW		38.3	38.3	50.8	50.8	31.9	31.9	42.4	42.4		
Inverter Efficiency (full load)	%	94	94	94	94	94	94	94	94	-	

1 Optional 0.9 output p.f.

2 Maximum amps equals full load current plus battery recharge current. Shipping pallet and packaging adds 50 to 300 lbs. per shipping unit.

† Specifications subject to change without notice. Please visit www.powerware.com for most current information.



Specifications ⁺					
Input					
Voltage Range	+10% to -15%				
Frequency Range	±3 Hz of nominal				
Surge Protection	Meets IEEE 587, Category A & B, EN 50091-2				
Power Factor	.85 lag at nominal full load; .90 lag with input filter				
Input Current Distortion	Less than 12% without input filter, less than 5% with optional input filter				
Inrush Current	6x input current (sub-cycle), 1x with Inrush limiter option				
Power Walk-in	Adjustable 3-60 second rectifier ramp-up to full utility load				
Output					
Voltage THD	Less than 5% for (100% non-linear load with 3:1 crest factor); less than 3% (100% linear load)				
Voltage Regulation	Better than ±1% (10-100% load)				
Transient Response	Less than 5% for 100% load step or removal				
Frequency (free run)	±0.01 Hz				
Frequency Sync Range	±0.5 Hz				
Frequency Slew Rate	1 Hz/second maximum (adjustable)				
Overload Capability	Up to 124% for 10 min, 125 to 150% for 10 seconds				
Maximum Output Capability	300% peak for four cycles without bypass				
Environmental					
Ambient Temperature - Operation - Storage	0°C to +40°C -20°C to 70°C				
Relative Humidity: Operation and Storage	Up to 95% non-condensing				
Altitude	1500 meters (5000 ft.) without load derating				
Audible Noise	Less than 75 dBA typical at 5 feet				
Electrostatic Discharge	Withstands 6 kV without damage or disturbance to the load; exceeds requirements of ENS0091-2				
EMC	Meets FCC Class A EN 50091-2 (CISPR 22, Class A, Restricted Access)				
Safety					
	UL1778 Listed; CUL CAN/CSA C22.2 N0.107.1				
	All cabinets provide seismic mounting features				
	Selectable DC ground fault detection capability				
Mechanical					
Cable Entry	Тор				
Cooling	Filtered forced air with redundant blowers				
Access	Front only				
Shipping Split	Largest single section is 63" long				
Dimensions	Single Module: 149"w x 39.5"d x 82"h; Multi-module: 127"w x 39.5"d x 82"h				
Weight (installed)	Single Module: 13,200 lbs.; Multi-module: 12,600 lbs.				
Communications					
Software Compatibility	PowerVision®, LanSafe™, FORESEER®				
Communication Cards	Connect UPS-X Web Card Modbus Card Single port serial Card Environmental Monitoring Probe (EMP)*				

* Requires Connect UPS-X Web Card

One-line Diagrams





Physical Dimensions



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F-T-N Powerware

Features & Benefits:

- Field growth capability of up to eight modules
- A System Bypass Module (SBM) features a single, system-level bypass for maintenance, fault clearing and emergency conditions
- •Two fully-redundant module monitoring networks provide system-level metering & alarm information to the SBM
- •The SBM monitor panel displays the same detail information available on the module monitor panel