Uninterruptible Power Supply (UPS)





FEATURES

PRODUCT FEATURES

- Smallest available footprint
- 98% total system efficiency
- Simple cost-effective installation
- Modular, scalable, and redundant architecture
- Low service and maintenance
- Cost-effective lifecycle cost
- Harmonic cancellation
- Transient protection
- High-speed voltage regulation
- Power factor correction
- Low input current distortion
- Top and bottom cable entry
- 40° C rating on entire system
- Rapid recharge time
- Utilizes flywheel energy storage technology
- Color Touch-screen operator interface
- Optional generator set start module
- Optional paralleling capability

RELIABLE POWER PROTECTION FOR CRITICAL APPLICATIONS

Cat® UPS systems provide constant power protection against surges, sags, and power interruptions that can disrupt operations or cause loss of valuable data or system capacity. Additionally, the use of the optional generator set start module can dramatically increase generator set starting reliability in a continuous power configuration.

UPS 600G SERIES MULTI MODULE SYSTEM

300 kVA / 240 kW, 60 Hz 600 kVA / 480 kW, 60 Hz

Caterpillar is leading the power generation marketplace with Power Quality Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost effectiveness.

SUPERIOR DESIGN

Superior system design and the use of robust digital components throughout the system yield the most reliable and trouble-free UPS system on the market. Protection is delivered in the industry's smallest package with the highest efficiency and superior performance.

LOWER TOTAL COST

The high operating efficiency means yearly savings versus traditional battery UPS products. In addition, lower Cat UPS heat rejection reduces up front HVAC costs and electrical consumption over the life of the product.

GENERATOR SET INTEGRATION

By cancelling harmonic distortion, the 600G Series operates seamlessly with generator sets to provide a higher total electrical load capacity without over sizing the generator set. The 600G Series effectively insulates the generator set from block loads and transient, and can improve its fault clearing capabilities. Programmable integration with standby generator sets assures greater system reliability and improves the total system operation.

WORLDWIDE PRODUCT SUPPORT

- Parts Distribution Centers are located worldwide with available service support through Caterpillar and the Cat Dealer Network.
- Factory certified service technicians are trained to support every aspect of your Cat UPS system.



FACTORY INSTALLED STANDARD AND OPTIONAL EQUIPMENT

STANDARD FEATURES	OPTIONAL FEATURES
Battery free, flywheel energy storage	24-volt DC, generator set starting power
IGBT Based Bi-directional converter	Remote SNMP/MODBUS monitoring
Integral modem – remote communication	Remote Status Panel (8 status LED's)
Local Emergency Power Off (EPO)	4 wire input and output
Remote notification and monitoring via Ethernet and	
e-mail	Remote EPO
RS232 or RS485 serial connection	Ability to parallel up to 7 systems
UPS View – advanced real-time monitoring software	Redundant flywheel and UPS
10" color touch-screen operator interface	External Synchronization input
Programmable input and output contacts	Separate Bypass Input
Redundant cooling fans	Field Expandable
High Speed Voltage regulation and Power Factor	
Correction	Automated Internal Maintenance Bypass
Back feed protection	External Maintenance Bypass Control
Harmonic cancellation	
Monitoring and alarms for all critical components with	
intelligent self-diagnostics	
Top/Bottom cable entry	
Redundant Control Power	
Static Bypass Switch	
Superior Power Conditioning	
High Overload Capacity	

SPECIFICATIONS

INPUT		
Voltage	480 VAC 3-phase, 3 wire + ground (4-wire optional)	
Voltage Range	+10% / -15% (programmable)	
Frequency	60 Hz (+/-)10% max.	
	(programmable)	
Power Factor	0.99 at rated load and	
	nominal voltage	
Harmonic Current Dis	stortion	
Linear Load	<3% at 100% resistive load	
Non-linear load	<8% with 100% non-linear	
	load	
Surge Withstand	Meets IEEE 587 / ANSI	
	C62.41	
Walk-in	1 to 15 seconds	
	(programmable)	

OUTPUT		
Voltage	480 VAC 3-phase, 3 wire plus	
	ground	
Voltage Regulation		
Steady-state	+/-1% of nominal for	
	+/-10% input	
Transient	+/-1% within 50 milliseconds	
	for 100% load step	
Flywheel mode	+/-1% steady state	
Voltage distortion ⁽¹⁾	<3% linear loads and	
	<5% 100% non-linear loads	
Frequency	60 Hz (mains synchronized)	
	normal operation +/2% free	
	running	
Slew Rate	Adjustable from 0.2	
	Hz/second to 3.0 Hz/second	
Overload Capability (r	normal operation)	
Continuous	Up to 105%	
10 Minutes	125%	
2 Minutes	150%	
30 Seconds	200%	
10 milliseconds	>200%	

⁽¹⁾ In accordance with EN 62040-3



TECHNICAL DATA

Model		UPS 300G	UPS 600G	
Maximum kVA		300	600	
Maximum kW		240	480	
Input Voltage (nom	ninal)	480 VAC 3-phase 3 wire plus ground		
Output Voltage (no	minal)	480 VAC 3-phase 3 wire plus ground		
Input Current (amps)				
Nominal (480 VAC)		302	599	
Maximum Continuous		400	800	
Maximum Non-Continuous		420	840	
Output Current				
Nominal (480 VA	C)	361	723	
System Efficiency		97%	98%	
Heat Dejection	BTU/Hr	29,612	41,983	
Heat Rejection	kW	8.7	12.3	

DIMENSIONS & WEIGHTS

UPS 300G		
Depth	865 mm	34.0 in
Width	3,226 mm	127.0 in
Height	2,442 mm	96.0 in
Weight	3,198 kg	7,050 lbs
UPS 600G		
Depth	865 mm	34.0 in
Width	4,318 mm	170.0 in
Height	2,442 mm	96.0 in
Weight	5,239 kg	11,550 lb
UPS 600G N-	-1	
Depth	865 mm	34.0 in
Width	5410 mm	213.0 in
Height	2,442 mm	96.0 in
Weight	7,280 kg	16,050 lb

ENVIRONMENTAL

Temperature	
Operating	32 to 104°F
	0 to 40°C
Storage	-13 to 158°F -25 to 70°C
	-23 to 10 C
Humidity	5% to 95% (non-condensing)
Altitude	Up to 3,000 feet Up to 914 meters

RIDE THROUGH TIME (SEC)

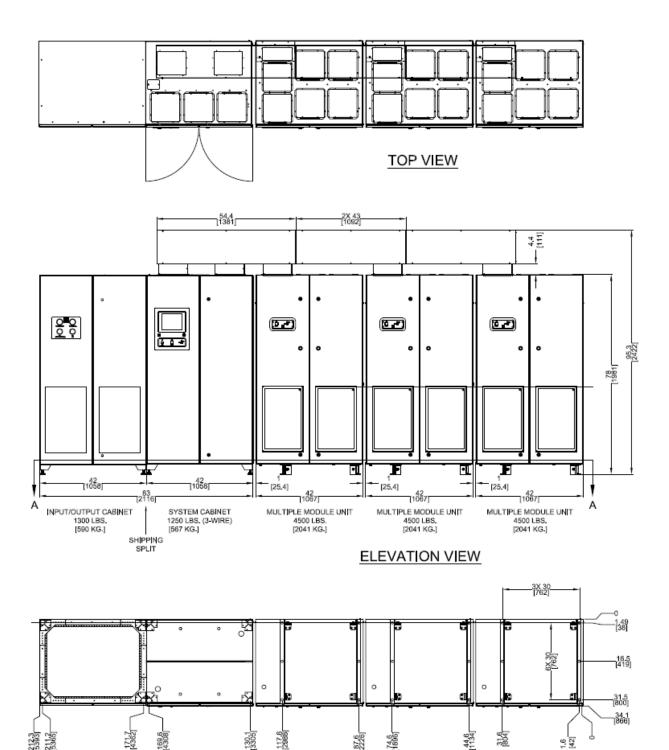
Model	100% Load	, .	50% Load	25% Load
UPS 300G UPS 600G	14	19	28	52

CERTIFICATIONS

UL 1778 listed
CUL CAN/CSA 22.2 No. 107.1 listed
EN50091-1-1
CE Mark

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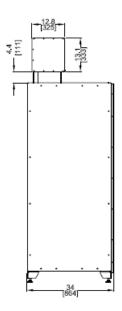




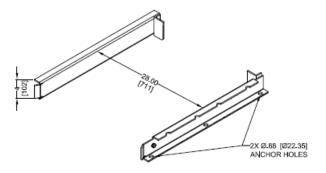
SECTION A-A PLAN VIEW

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LEFT SIDE VIEW



CLEAT ANCHOR HOLES

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