

Uninterruptible Power Supply (UPS)



Image shown may not reflect actual product

Cat[®] UPS 220

150 / 180 / 225 kVA

60 Hz 480 Volt 3-phase

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

FEATURES

PRODUCT FEATURES

- Double conversion topology
- Integrated battery management system
- Small footprint
- Up to 93.5% total system efficiency
- Transient protection
- High-speed voltage regulation
- Bottom cable entry
- Low input current distortion
- Simple installation
- Low maintenance
- Quiet operation
- Galvanic Isolation
- Parallel capable

RELIABLE POWER PROTECTION FOR CRITICAL APPLICATIONS

Cat[®] double conversion battery UPS systems provide clean, stable power to sensitive loads, ensuring critical power protection, optimum performance, and extended life of the protected equipment.

SUPERIOR DESIGN

Superior system design and the use of robust digital components throughout the system yield a reliable and trouble-free UPS system.

HIGH AVAILABILITY

The UPS has been designed for continuous operation. Redundant components and cooling are available for increased reliability, and the UPS is fault tolerant with built in 100% rated static bypass switch.

UPGRADEABLE POWER LEVELS

The Cat UPS 220 is field upgradeable up to 225 kVA to provide additional power requirements without the expense of additional equipment or installation costs.

SIMPLE AND SECURE PARALLELING TECHNOLOGY

Paralleling technology for redundancy or capacity by using the output of the modules together. Up to 4 modules can be paralleled with a maximum capacity of 800kVA. Easy cable landing is facilitated by a system level wrap around the maintenance bypass. System level maintenance bypass is provided, and internal maintenance bypass is provided on each UPS module.

WORLDWIDE PRODUCT SUPPORT

Cat dealers provide extensive post sale support including maintenance and repair agreements. Factory qualified technicians are trained to support every aspect of your Cat UPS system.

FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

- Front Panel Display
 - Black-lit, wide angle graphic display
 - LED mimic diagram
 - Event logging with date-time stamping of over 500 events
 - Audible alarms
- Advanced Monitoring provides intelligent battery management that automatically tests the battery system and provides life cycle monitoring of remaining battery life expectancy.
- Alarm Relay Card
Six 24 Volt Output Contacts preconfigured to provide Standard UPS output conditions
 - EPO
 - Battery Circuit Breaker
 - Battery Temp
 - Auxiliary
 - Low Battery
 - On UPS
- Modbus Communication card provides UPS (Uninterruptible Power Supply) data (states and measures). The system provides a communication channel with an RS485 or RS232 interface.
- Network Management card
SNMP protocol over 10/100MB Ethernet connection, plus web interface and direct email/pager/SMS notification.

COMMUNICATIONS OPTIONS

- Second Alarm Relay Card
Dry contacts provide six (6) normally open contacts rated at 2.0A (250 VAC/30 VDC) for remote monitoring of UPS operation. Default parameters are: UPS on line, load on bypass, UPS on battery, low battery warning, battery fault, and general alarm. Also includes two (2) inputs to remotely turn the UPS inverter off and on.

INPUT/OUTPUT VOLTAGE OPTIONS

- 208V or 600V
Options available via input/output transformers. Transformers installed in a matched transformer enclosure for installation adjacent to the UPS.

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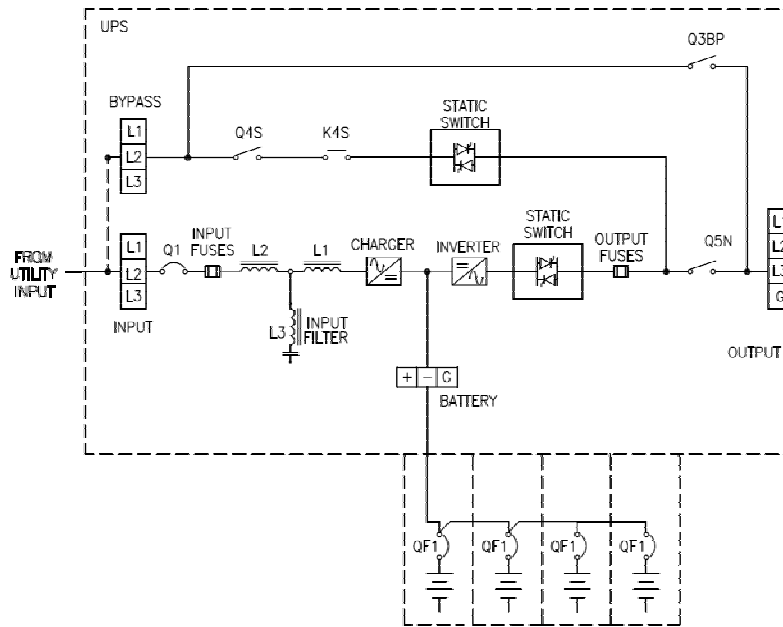
TECHNICAL DATA

Rated Power kVA (kW)	150 (135)	180 (162)	225 (202.2)
Normal AC input			
Input Voltage (V)	480 V Core, 3 Wire+Ground (208V, 600V w/Aux Transformer 4 Wire+Ground)		
Frequency	60 Hz \pm 10%		
Power Factor	Up to 0.9		
Nominal current input at 480V	210A	260A	300A
Maximum current input at 480V	231A	286A	320A
Current Distortion (THDI)	<10%	<8%	<7.5%
Bypass AC input			
Bypass Instant Overload (1 cycle)	22x nominal current for 1 cycle		
Output			
Output Voltage	480V Core, 3 Wire+Ground (208V, 600V w/Aux Transformer 4 Wire+Ground)		
Frequency	60 Hz		
Power Factor	> 0.9		
Nominal output current at 480V	181A	217A	271A
Voltage Regulation	\pm 1.0% balanced load		
Voltage Transient Response	\pm 2% for 100% step load		
Voltage Distortion	<2% L-L and <3% L-N for non-linear loads		
Inverter Overload	150% for 1 min, 125% for 10 min		
Overall Efficiency			
Double conversion mode	Up to 93.5%		
Environmental			
Storage temperature	-20°C to +45°C (-4°F to 113°F)		
Operating Temperature	UPS 0-40°C (32° - 104°F), Battery 25°C (77°F)		
Operating Altitude	1000m		
Operating Humidity	0-95% non-condensing		
Heat Rejection (BTU/Hr) @ 480V	38534	46240	48046
Audible Noise (dBA)	64	65	68
Standards and Approvals			
Design	NFPA / NEC / NEMA / OSMA		
Product and Safety	UL 1778 - ULC		
Electromagnet Capability	FCC Part 15, Subpart J, Class A - IEEE587 / ANSI 62.41		
Dimensions and Weights			
Module Dimensions	48" W x 33" D x 75" H		
Weight (pounds)	3050		

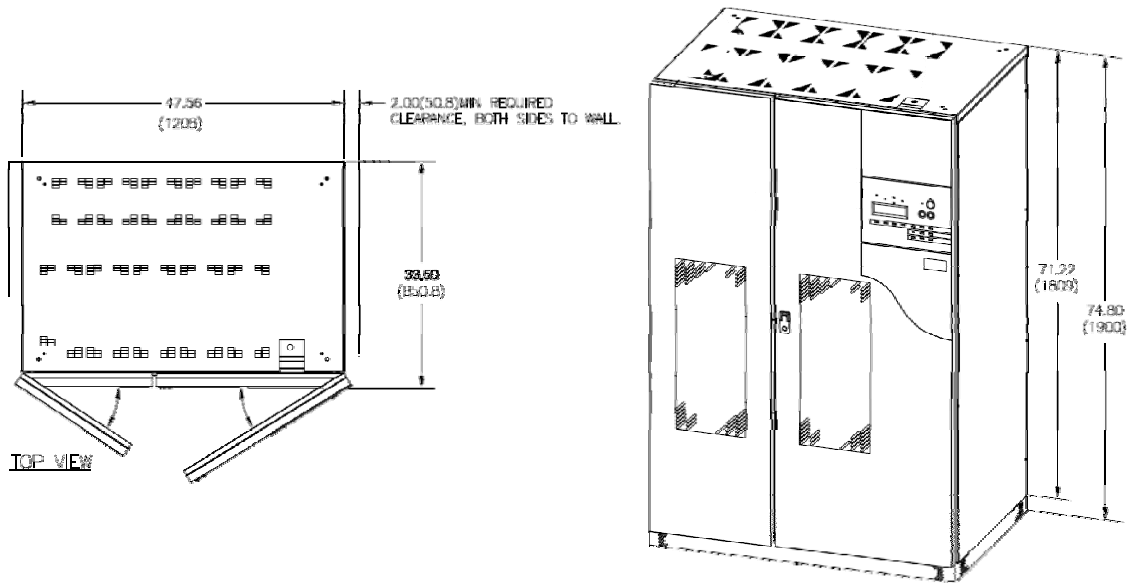
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ONE LINE DRAWING



ELEVATION DRAWING



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