

UNINTERRUPTIBLE POWER SUPPLY (UPS)



Image shown may not reflect actual product.

Cat[®] UPSB125

50 Hz

60 kVA – 120 kVA

(54 kW – 108 kW)

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
- Batteries provide 5 minutes to 8 hours back-up
- Small footprint
- Up to 94% total system efficiency
- Power factor corrected input
- Transient protection
- High-speed voltage regulation
- Bottom cable entry
- Low input current distortion
- Simple installation
- Low maintenance
- Quiet operation
- Parallel up to six units

RELIABLE POWER PROTECTION FOR CRITICAL APPLICATIONS

Cat[®] double conversion battery UPS systems utilize IGBT based technology to 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.

FLEXIBLE AND UPGRADEABLE

The UPS is field expandable from 100 to 120 kVA. Further capacity can be added by paralleling multiple UPS. The UPS has an intuitive man/machine interface with a large high definition display and animated mimic display. With the addition of optional communication cards, it can be easily integrated into networking and monitoring systems using common protocols such as Modbus or SNMP.

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.

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FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

- Front Panel Display
 - LCD display
 - LED mimic diagram
 - Event logging with date-time stamping of over 2000 events
- 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
 - Dry contacts provide six (6) normally open contacts rated at 2.0A (250 VDC/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.

OPTIONAL EQUIPMENT

- RS232/RS485 Card
 - JBus or Modbus protocol for use with third party Building Management Systems (BMS) to monitor detailed three phase information.
- Second Alarm Relay Card
 - Dry contacts provide six (6) normally open contacts rated at 2.0A (250 VDC/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.

- Network Management Card
 - SNMP protocol over 10/100MB Ethernet connection, plus web interface and direct email/pager/SMS notification.
- Single input
 - Provision converting unit to a single source input.
- Battery Circuit Breaker
 - Provides circuit breaker disconnect for battery power source for use with customer supplied batteries
- Transformer
 - Provides galvanic isolation for the output of the UPS.
- Top cable entry
 - Provides auxiliary cabinet for top cable entry.
- Backfeed protection
 - Provides disconnect of the UPS from the input source on UPS discharge
- External sync
 - Provides controls to synchronize the outputs of two UPS modules.

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TECHNICAL DATA

Rated Power kVA (kW)	60 (54)	80 (72)	100 (90)	120 (108)
Normal AC Input				
Input Voltage (V)	380V - 400V - 415V 3 Wire+Ground*			
Frequency	50 Hz ±5%			
Power Factor	<0.99			
Current Distortion (THDI)	< 5%			
Bypass AC Input				
Bypass Overload	10x nominal current for 1 cycle			
Output				
Output Voltage	380V - 400V - 415V 3 Wire+Ground			
Frequency	50 Hz			
Voltage Regulation	± 1.0% balanced load, ±2.5% unbalanced load			
Voltage Transient Response	± 5% for 100% step load, ± 1% for loss or return of AC input			
Voltage Recovery Time	Within 1% of nominal within 1 cycle			
Voltage Distortion	<1% L-L and L-N for non-linear loads (<2% max)			
Inverter Overload	150% for 1 min, 125% for 10 min			
Overall Efficiency				
Double conversion mode	Up to 94%			
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			
Audible Noise at 1m (3 ft)	66 dBA	63 dBA	63 dBA	63 dBA
Dimensions and Weights				
UPS Cabinet	712mm W x 850mm D x1900mm H			
Weight (kg)	400 kg	520 kg		
Battery Cubicles (depth = 850 mm, height = 1900 mm)				
Minutes	5	5	5	5
Dimensions (width) in mm	1112 mm ⁽¹⁾	1112 mm ⁽¹⁾	712 mm	712 mm
Weight (kg)	958 kg ⁽¹⁾	1120 kg ⁽¹⁾	945 kg	999 kg
Minutes	10	10	10	10
Dimensions (width) in mm	1112 mm ⁽¹⁾	712 mm	1012 mm	1012 mm
Weight (kg)	1045 kg ⁽¹⁾	951 kg	1230 kg	1310 kg
Minutes	15	15	15	15
Dimensions (width) in mm	712 mm	1012 mm	1012 mm	1424 mm
Weight (kg)	951 kg	1230 kg	1310 kg	1902 kg
Minutes	30	30	30	30
Dimensions (width) in mm	1012 mm	1424 mm	1724 mm	2024 mm
Weight (kg)	1310 kg	1902 kg	2445 kg	2748 kg

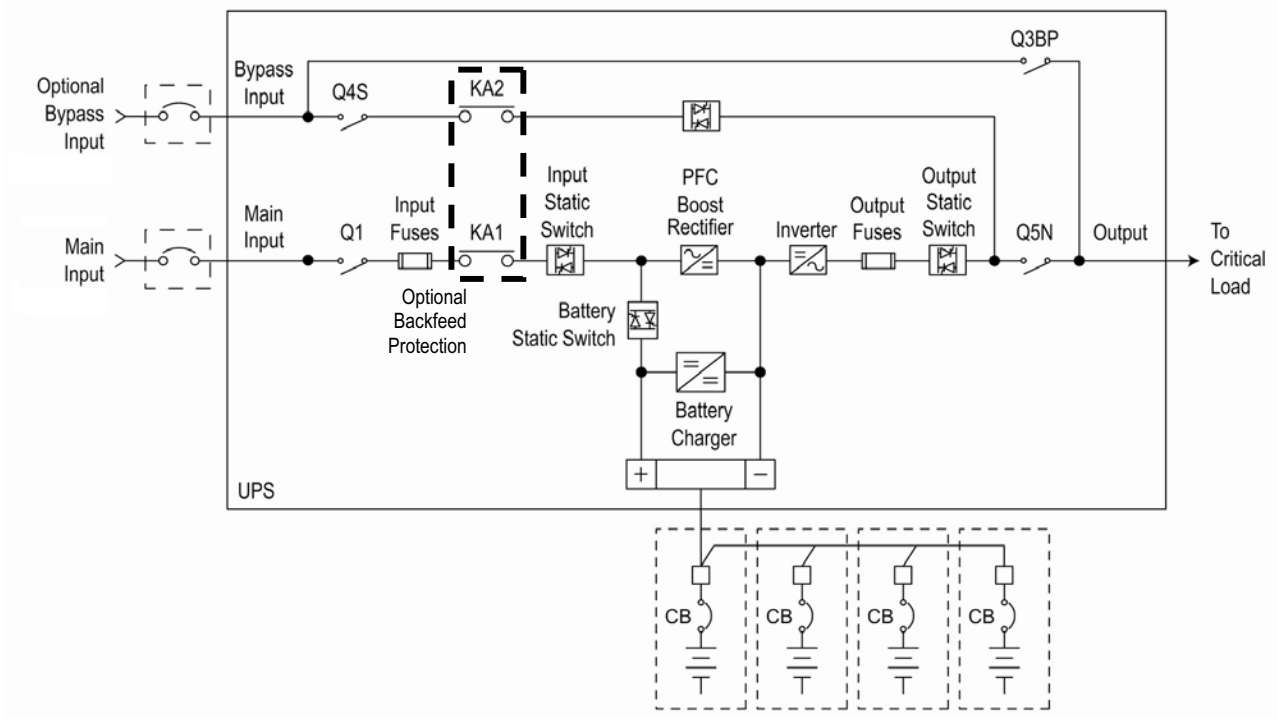
Additional battery cubicle combinations are available. Contact your local Cat dealer for more information

* The UPS does not require a neutral on the input. If one is required, the neutral will be passed through the UPS bypass.
(1) Includes UPS

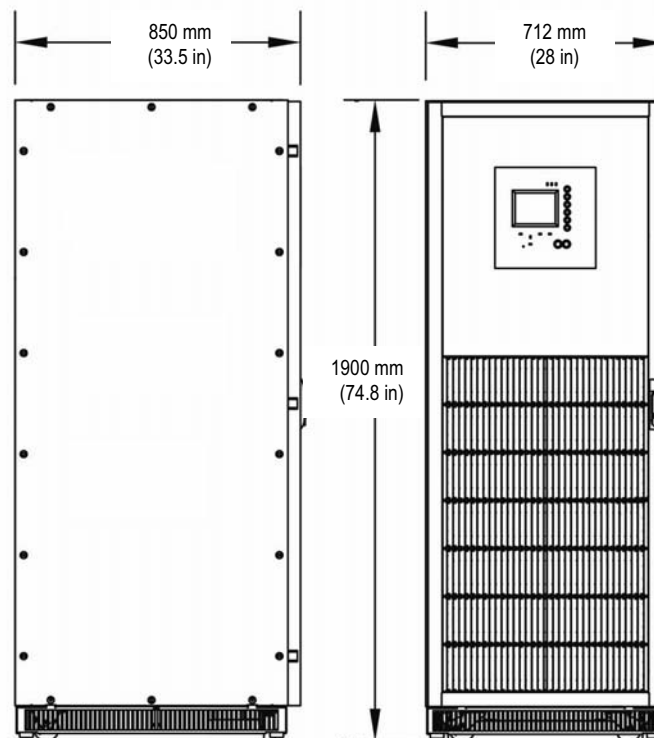
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ONE LINE DRAWING



ELEVATION DRAWING



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