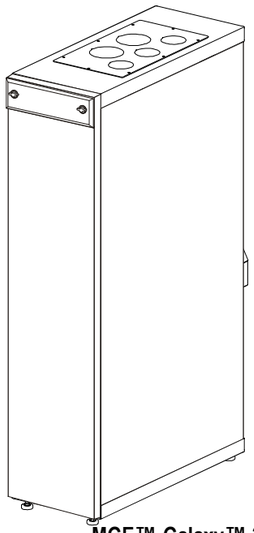
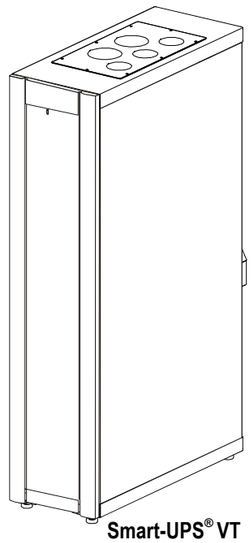
Installation

MGE™ Galaxy™ 3500 and Smart-UPS® VT Parallel Maintenance Bypass Panel Floor Mount 45 kVA and 90 kVA 208 V



MGE™ Galaxy™ 3500
45 kVA and 90 kVA



Smart-UPS® VT
45 kVA and 90 kVA

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

Warning: ALL safety instructions in the Safety Sheet (990-2940) must be read, understood and followed when installing the UPS system. Failure to do so could result in equipment damage, serious injury, or death.

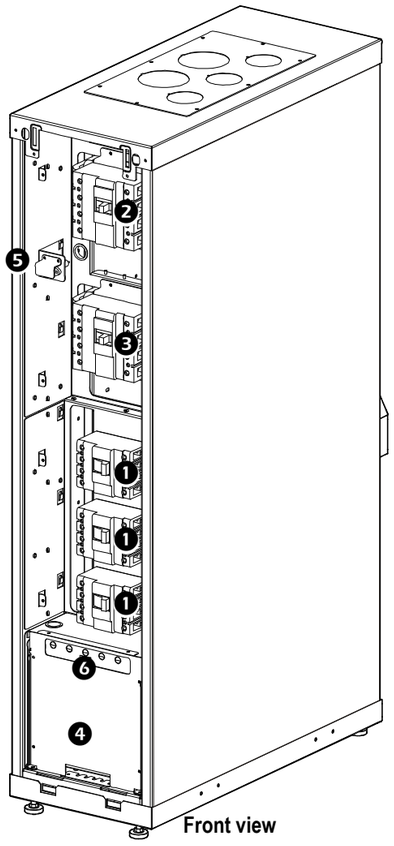
Caution: All electrical power and power control wiring must be installed by a qualified electrician, and must comply with local and national regulations for maximum power rating.

Caution: Operation and Maintenance must only be performed by qualified personnel.

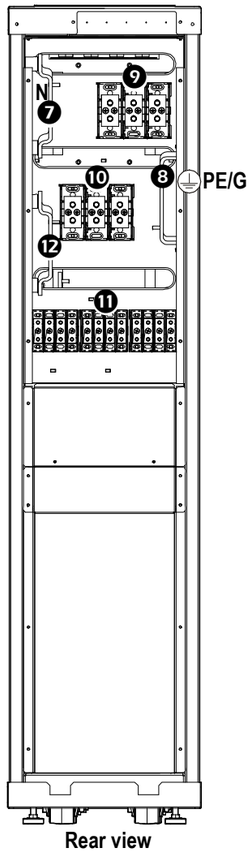
990-3601A-001 7/2010

Product Overview

45 kVA



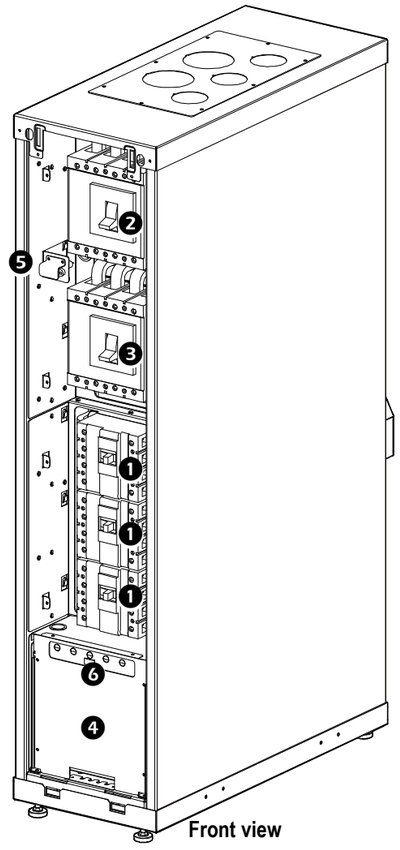
Front view



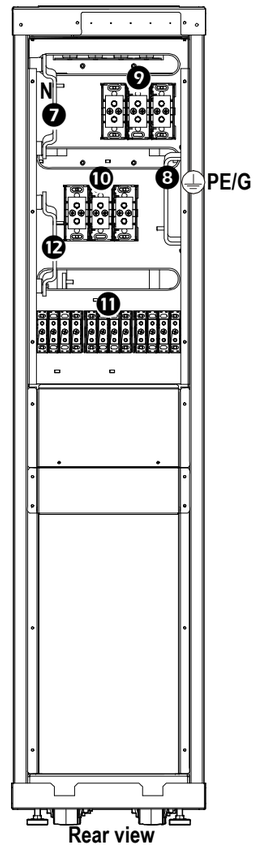
Rear view

1. Q2 UPS isolations
2. Q3 Maintenance bypass. A Phillips screwdriver is required to unlock Q3
3. Q4 system isolation
4. MBP CAN I/O boards (x3)
5. Control fuse
6. Led indicators
7. Input neutral busbar
8. PE/ground busbar
9. Mains input
10. Critical load
11. UPS output
12. Output neutral busbar

90 kVA



Front view



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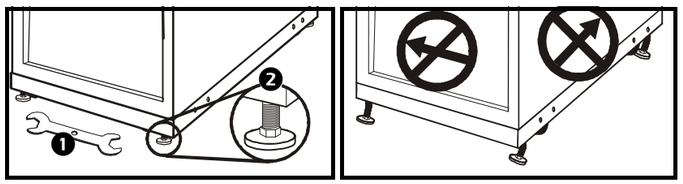
Site Planning

Note: Refer to the UPS Receiving and Unpacking sheet (990-2940 for MGE Galaxy 3500 and 990-1747 for Smart-UPS VT) to determine the space requirements for the MBP. Consult local codes for any additional requirements. Ideally, install the MBP in a location close to the UPS.

Level the Enclosure

Warning: The system must be installed on a level floor. The leveling feet will stabilize the enclosure, but will not account for a badly sloped floor.



❶ Use a 13/14 mm wrench to adjust the four leveling feet.

❷ Ensure that the system is level.

Caution: Do not move the enclosure after the leveling feet have been lowered.

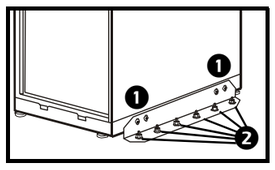
Floor Anchoring (if applicable)

Anchor the MBP enclosure to the floor

Note: Floor-anchoring bolts are not provided with the Maintenance Bypass Panel (MBP). Purchase the bolts locally (minimum size: M8). Follow the specifications given by the manufacturer when bolting the UPS system to the floor.

❶ Reuse the two transport brackets (one on each side) that were used to secure the UPS to the pallet during transport.

❷ Drill two to six holes in the floor for each bracket. Attach with bolts.



For seismic applications, see the APC website for seismic requirements.

Prepare for Cables

Note: All external cable connections with the UPS and mains must be made on-site. External cables are not supplied with the shipment.

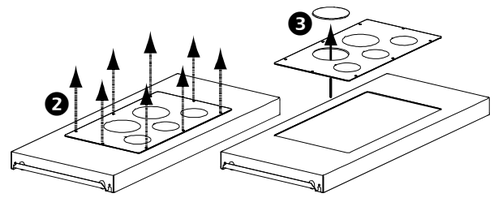
Note: All control wire connections between the UPS and the MBP must be made on-site. Control wires (30 m) for MBP CAN I/O boards are supplied with the shipment.

Create knockouts for cable access

❶Remove the front panel.

❷Remove the top or bottom cover.

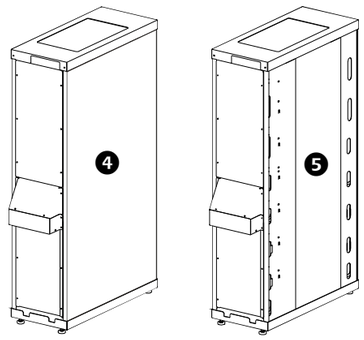
❸Use a knockout punch to create appropriate-sized holes for the cables/conduits in either the top or bottom cover of the MBP.



❹Remove the left or right side panel.

❺Remove the left or right inner panel.

❻Install conduits (if applicable) and re-install all the covers.



Run the Cables

Cable entry through the I/O box (UPS cables only)

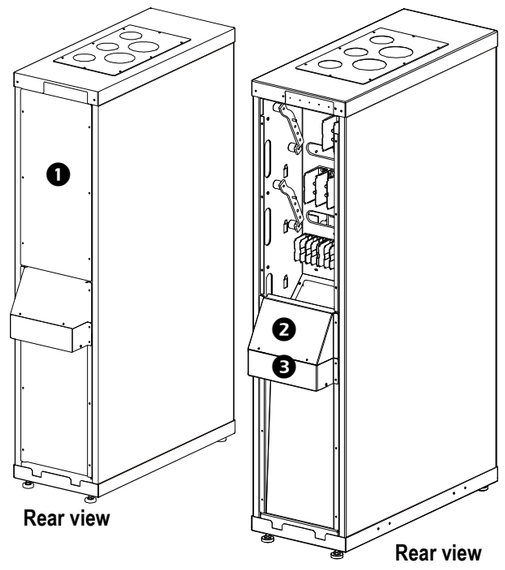
❶Remove the upper rear cover.

❷Remove the top cover of the I/O box.

❸Remove the bottom cover of the I/O box (this one will not be reinstalled).

❹Route the cables through the I/O box to the cables connection area.

❺Re-install the top cover of the I/O box.

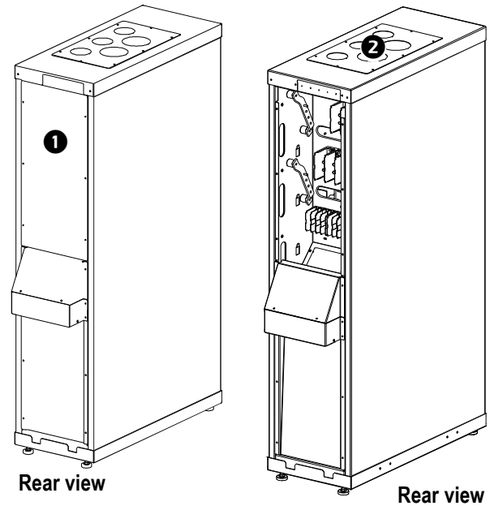


Top cable entry (input and output cables only)

❶Remove the upper rear cover.

❷Run the cables through the top cover to the cable connection area.

❸Re-install the upper rear cover.



Bottom cable entry (input and output cables only)

❶Remove the upper rear cover.

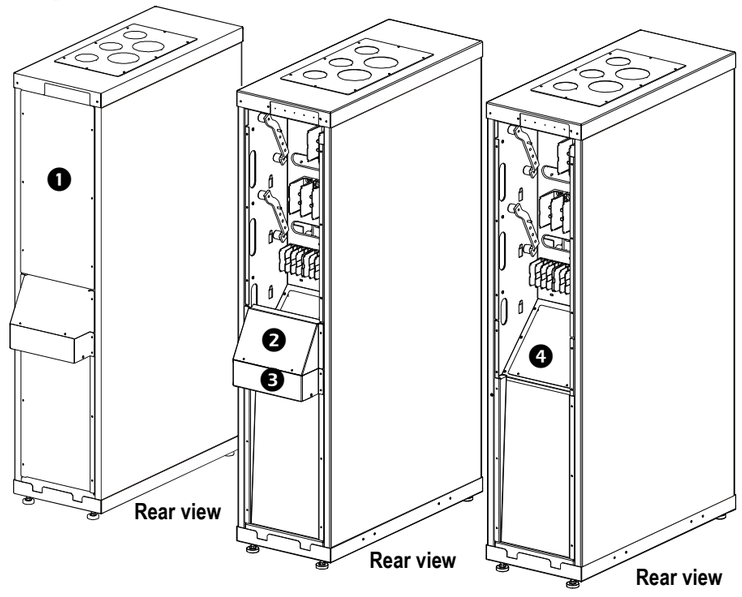
❷Remove the top cover of the I/O box.

❸Remove the bottom cover of the I/O box.

❹Remove the plate which blocks for cable access from the bottom.

❺Route the cables through the bottom to the cable connection area.

❻Re-install the I/O box.

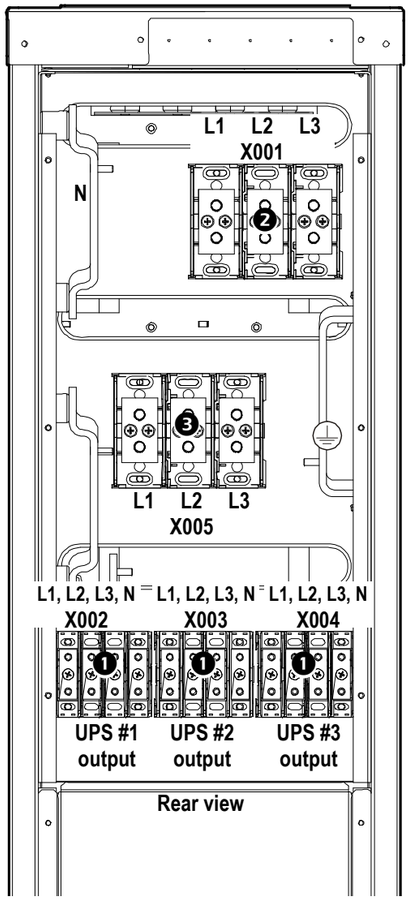


Connect Power Cables

❶Connect the UPS output from up to three UPS units **(L1, L2, L3, N, G)** to the UPS output terminals and the ground busbar.

❷Connect cables from the mains supply **(L1, L2, L3, N, G)** to the maintenance bypass terminals and the ground and input neutral busbars.

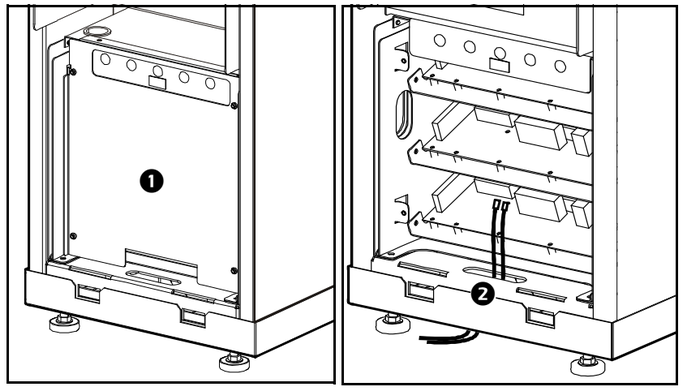
❸Connect cables from the critical load **(L1, L2, L3, N, G)** to the load terminals and the ground and output neutral busbars.



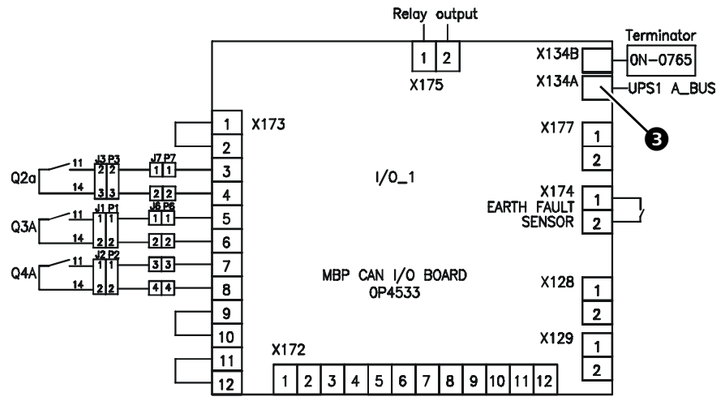
Connect Communication Cables

❶Remove the bottom cover.

❷Run the communication cables through the hole in the bottom front.



❸Connect the A-bus cables to X134A connectors on the MBP CAN I/O boards.



Specifications

Electrical	45 kVA	90 kVA
Voltage rating	208/220 V 4W+GND	208/220 V 4W+GND
Wiring (only use copper conductors suitable for at least 75°C)		
Maximum cable size	4/0 AWG	2 x 4/0 AWG
Mains input cable	4/0 AWG	2 x 4/0 AWG
UPS input cable	4 AWG	1 AWG
System output	4/0 AWG	2 x 4/0 AWG
UPS output cable	4 AWG	1 AWG

Warning: At 100% switch mode load, the system neutral connections must be rated for 173% phase current.

Physical		
Dimensions (H × W × D)	1487 x 352 x 837 mm (58.5 x 14 x 33 in)	1487 x 352 x 837 mm (58.5 x 14 x 33 in)
Weight	159 kg (350 lbs)	191 kg (420 lbs)
Shipping dimensions	1664 x 864 x 1219 mm (65.5 x 34 x 48 in)	1664 x 864 x 1219 mm (65.5 x 34 x 48 in)
Shipping weight	194 kg (426 lbs)	225 kg (496 lbs)

Environmental	
Operating environment	Indoor use only, protect from water and conductive contaminates
Operating temperature	0° to 40°C (32° to 104°F)
Humidity	0 to 95%, non-condensing

Torque value	
Terminal blocks X002, X003, X004	6.89 Nm (61 lb in)
Terminal blocks X001, X005	25.7 Nm (192 lb in)
Busbars M6	11.3 Nm (100 lbs in)

Contact Information

For local, country-specific centers: go to www.apc.com/support/contact.

Appendix

Diagram