

3U POD™

USER MANUAL

*Power Output
Distribution
208 Volt*



TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	1
GLOSSARY OF SYMBOLS	2
INTRODUCTION AND SYSTEM DESCRIPTION	3
System Description	3
INSTALLATION AND START-UP	4
Unpack and Inspect the 3U POD	4
Mount the POD in the Rack	4
Start Up the POD	5
INDICATOR LAMPS	6
UTILITY Indicator Lamp	6
UPS Indicator Lamp	6
OPERATION	7
Transfer to Maintenance Bypass	7
Transfer to UPS	7
SPECIFICATIONS	8
TROUBLESHOOTING	9

FIGURES

Figure 1	UPS mode of operation	3
Figure 2	UTILITY/maintenance bypass mode	3
Figure 3	3U POD connections	3
Figure 4	3U POD with rack mounting brackets	4
Figure 5	Indicator lamps on 3U POD	6

IMPORTANT SAFETY INSTRUCTIONS



WARNING

DO NOT ATTEMPT TO SERVICE THIS PRODUCT YOURSELF. OPENING OR REMOVING THE COVER MAY EXPOSE YOU TO DANGEROUS VOLTAGES, EVEN WHEN THE AC CORD IS DISCONNECTED FROM THE ELECTRICAL SOCKET. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAVE THESE INSTRUCTIONS

This manual contains important instructions that should be followed during installation and operation of the 3U POD™.

This product is designed for commercial / industrial use only, with Liebert UPS systems. It is not intended for use with life support and other designated “critical” devices. Do not exceed POD or UPS rating labels.

Read all safety and operating instructions before operating the 3U POD™ and the connected UPS system. Adhere to all warnings on the unit and in this manual. Follow all operating and user instructions.

Turn the UPS off and unplug the 3U POD™ before cleaning. Use only a soft cloth, never liquid or aerosol cleaners.

The UPS and 3U POD™ are designed for data processing equipment. Do not plug laser print or appliances, such as hair dryers, heaters, vacuum cleaners, or electric drills, into the UPS output sockets.



WARNING

DO NOT MODIFY THE CABLES IN ANY WAY. THE POD SOCKETS SHOULD MATCH THE UPS SOCKETS. CONSULT YOUR DEALER IF THE AC CORDS DO NOT MATCH THE UTILITY SOCKET. THE 3U POD™ MUST BE GROUNDED AT ALL TIMES WHILE IN USE. TURN OFF THE UPS BEFORE UNPLUGGING IT.

The UPS and the 3U POD™ are equipped with grounded plugs (plug types vary depending on model). Do not defeat the safety purpose of this plug. If unable to fully insert the plug into the designated socket, contact a qualified electrician or your local dealer or Liebert representative for assistance.

Route power supply cords so they are not walked on or pinched in anyway.



CAUTION

Risk of electric shock; do not remove cover, no user serviceable parts inside. Refer servicing to qualified service personnel.



CAUTION

This device receives power from multiple sources. Before servicing this device, remove all connections. Before servicing the UPS, follow “Maintenance of UPS” instructions in the user manual for your UPS.



CAUTION

This device is for use in a controlled environment. Refer to manual specifications for environmental conditions.



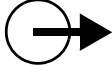
WARNING

WHEN THE 3U POD™ IS IN UTILITY POSITION (MAINTENANCE BYPASS MODE) THE POWER TO THE CONNECTED LOAD IS NOT FILTERED OR CONDITIONED BY THE UPS. THE LIEBERT UPS CONNECTED EQUIPMENT GUARANTEE IS NOT VALID WHILE IN THIS MODE OF OPERATION.

GLOSSARY OF SYMBOLS



Indicates AC Input.



Indicates AC Output.



Consult the manual for additional information.

UTILITY

UTILITY lamp indicates local power is available and the load may be transferred to bypass the UPS.

UPS

UPS lamp indicates UPS power is available and the load may be transferred to the UPS to provide computer-grade power to the load.

INTRODUCTION AND SYSTEM DESCRIPTION

Congratulations on your choice of the Liebert 3U POD™. The Liebert 3U POD provides maintenance bypass capability as well as power output distribution. The Liebert 3U POD can be used on UPSs in the rack mount or tower configuration.

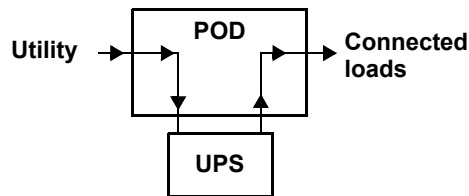
The Liebert 3U POD provides an isolated path of power for your UPS system for preventive maintenance or service.

System Description

The 3U POD has two modes of operation: **UPS** (UPS available) and **UTILITY** (maintenance bypass).

- In **UPS mode**, the power is routed through the UPS system delivering conditioned power to the load, as shown in **Figure 1**.

Figure 1 UPS mode of operation



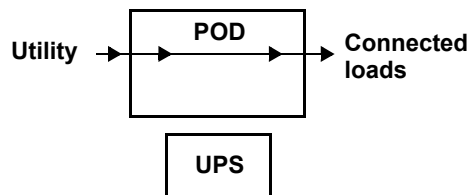
- In **UTILITY mode**, the power is routed around (bypassing) the UPS system (see **Figure 2**). Utility power is supplied directly to the load through the 3U POD.



CAUTION

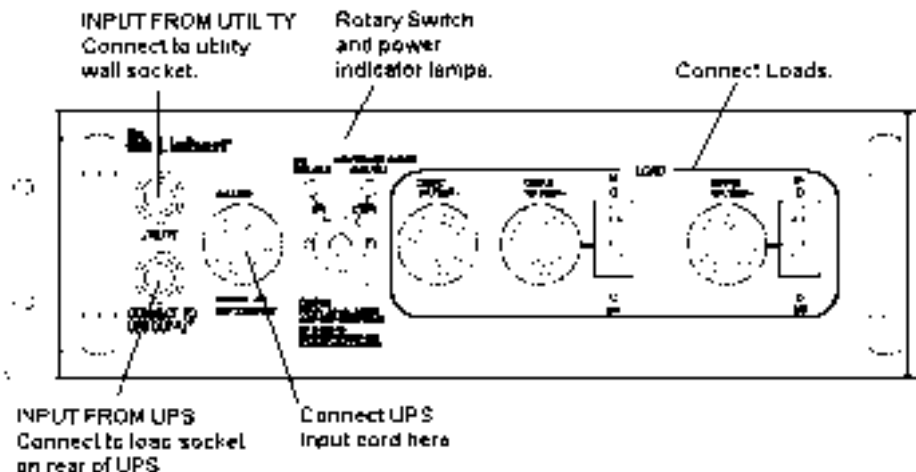
Battery back-up and conditioned power are NOT available during the UTILITY mode of operation.

Figure 2 UTILITY/maintenance bypass mode



- The UPS may be turned off and removed without affecting the load. See **Figure 3**.

Figure 3 3U POD connections



INSTALLATION AND START-UP

Unpack and Inspect the 3U POD



NOTE

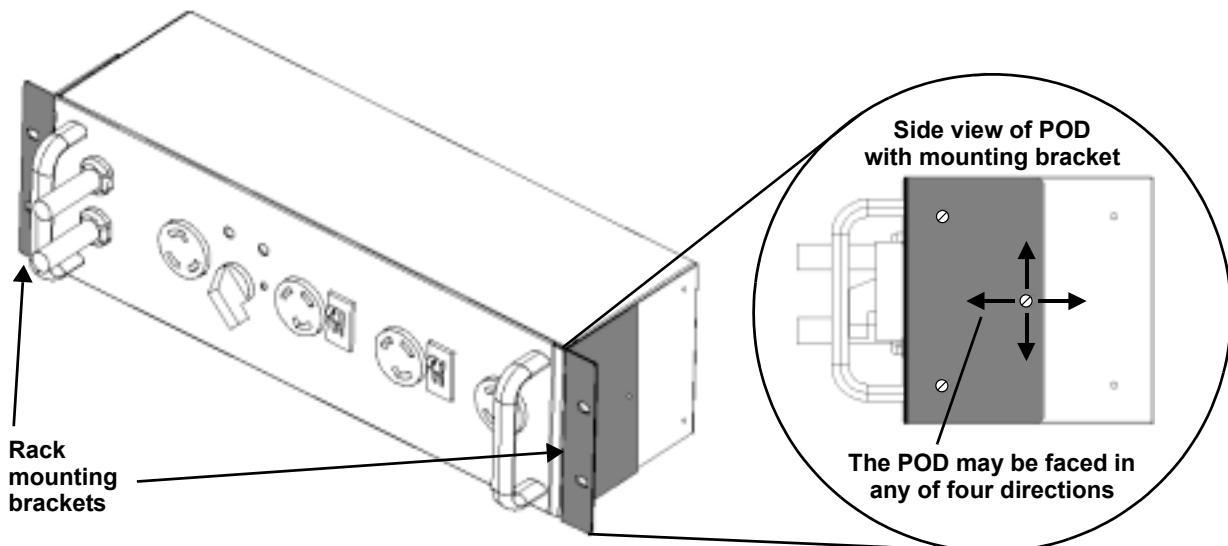
This manual provides instructions for the 3U POD only. Refer to your UPS manual for UPS operation and installation instructions.

1. Unpack the 3U POD carefully, noting the packing method. Retain the box and packing material for possible future shipments.
2. Visually inspect the 3U POD for freight damage. Report damage to the carrier and your local dealer or Liebert representative.
3. Verify that the 3U POD input cord, UPS input cord, and receptacle for the UPS have the same type of configuration.

Mount the POD in the Rack

1. Rack mount installation of the 3U POD is possible with the use of the rack mounting brackets (shipped with the POD). See **Figure 4**.
2. The rack mount brackets allow you to rack mount the POD in a 19" enclosure (23" to 19" rack adapters would have to be purchased separately if you are using our 23" Foundation or equivalent cabinet).
3. The POD can be mounted to face one of four directions depending on your application, utilizing the rack mount brackets provided.
4. Attach the brackets to the POD first with the screws provided (three screws per bracket), making sure to face the POD in the desired direction first.
5. Consult your rack/enclosure manufacturer's recommendations for specific rack mounting hardware that will be required.
6. Tighten the POD securely to the rails, and then follow the start-up directions for the POD in the next section, **Start Up the POD**.

Figure 4 3U POD with rack mounting brackets



Start Up the POD



NOTE

*Be sure to complete the rack mount installation before proceeding, as described in the previous section, **Mount the POD in the Rack.***

1. If you already have a UPS installed, turn off all connected loads and unplug them from the UPS. Turn off the UPS and disconnect the UPS input cord.
2. Make sure the 3U POD rotary switch is in the UTILITY position. Plug the POD input cord (labeled UTILITY) into the utility outlet (wall receptacle).
WARNING: The 3U POD is now electrically live. The UTILITY lamp (orange) should now be illuminated.
3. Plug the UPS input cord into the receptacle on top of the 3U POD labeled “CONNECT UPS LINE CORD HERE.”
WARNING: The UPS system is now electrically live.
4. Connect the second POD input cord (labeled UPS) into the matching load receptacle on the rear of the UPS.
5. Plug in all loads to the output distribution receptacles, evenly distributing them on the 3U POD. The 3U POD now powers your equipment in the UTILITY mode.
6. Turn ON the loads and ensure all are up and operating according to specification.
7. Start the UPS according to its specific user manual.
8. Verify that the UPS lamp (green) on the 3U POD is illuminated. If so, transfer the rotary switch from UTILITY to UPS. The load is now being supplied with conditioned power through the UPS.
9. Before any operation or procedure, always verify that both the UPS lamp (green) and the UTILITY lamp (orange) are illuminated before changing the status of the rotary switch.

INDICATOR LAMPS

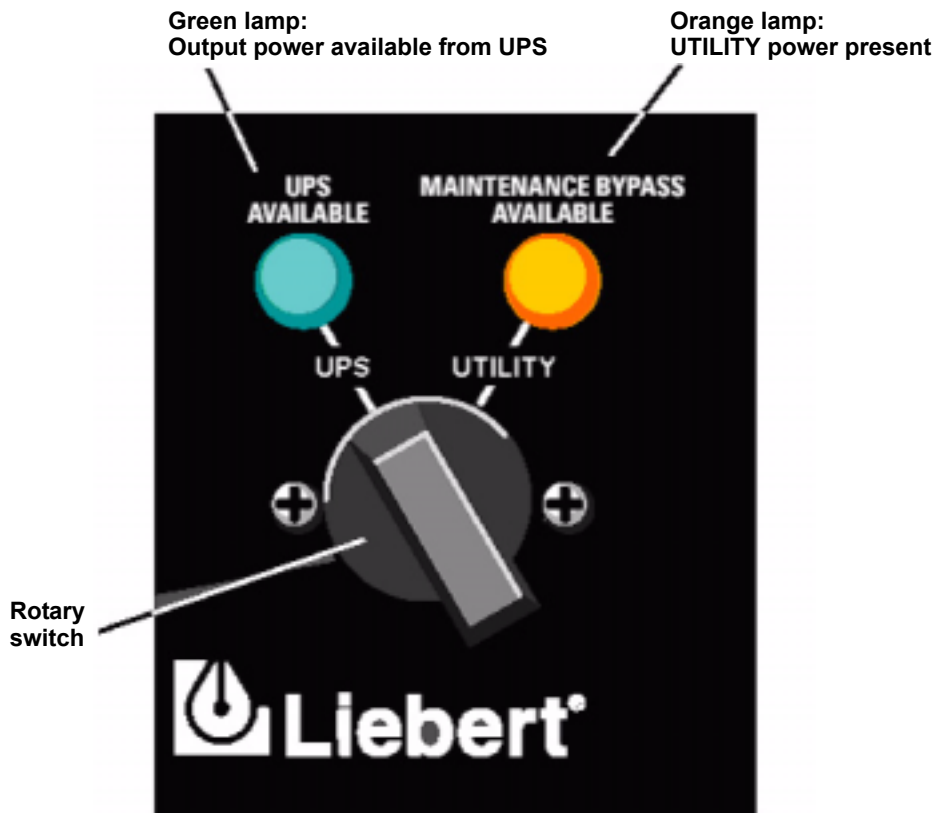
UTILITY Indicator Lamp

This orange lamp is illuminated when utility power is present (see **Figure 5**). It signals that you may transfer the loads to maintenance bypass (UTILITY mode) operation via the rotary switch. During a utility power outage, this lamp will be off and the UPS will supply battery back-up power to the connected loads.

UPS Indicator Lamp

This green lamp is illuminated when there is output power available from the UPS (see **Figure 5**). It signals that it is safe to transfer the connected loads from utility power back to UPS output power.

Figure 5 Indicator lamps on 3U POD



OPERATION

Transfer to Maintenance Bypass

To transfer to maintenance bypass (utility) from UPS, use the following steps:

1. Ensure the UTILITY lamp (orange) is illuminated. If the lamp is not illuminated, refer to **Troubleshooting** section.
2. Transfer the rotary switch from UPS to UTILITY, provided the UTILITY lamp is illuminated on the 3U POD.
3. Turn the UPS off.
4. Disconnect the two cables connecting the UPS to the 3U POD.
5. You may now service the UPS.

Transfer to UPS

To transfer to UPS from maintenance bypass (utility), use the following steps:

1. Reconnect the UPS to the 3U POD. Start the UPS according to the instructions in the UPS user manual.
2. Verify that UPS lamp (green) on the 3U POD is illuminated. If so, transfer the rotary bypass switch from UTILITY to UPS. If the lamp does not illuminate, refer to **Troubleshooting** section.

SPECIFICATIONS

Transfer Time (to and from maintenance bypass)	< 6 milliseconds
Operating Ambient Temperature	0°C to +40°C (32°F to 104°F)
Storage Ambient Temperature	-20°C to +60°C (-4°F to 140°F)
Dimensions with brackets W x D x H: mm (in.)	482.6 x 133 x 133 (19.0 x 5.24 x 5.24)
Humidity	0 to 95% non-condensing
Agency/Standards	UL, CSA
Electrical Rating	See Model Label on 3U POD

This 3U POD is intended for use with a UPS meeting all the following requirements:

- UPS input cord is compatible with the rating and type of receptacle on the 3U POD labeled “CONNECT UPS LINE CORD HERE.”
- UPS output receptacle is compatible with the 3U POD input power connector labeled “UPS.”
- Available utility receptacle is compatible with the 3U POD input power connector labeled “UTILITY.”

TROUBLESHOOTING

Problem	Cause	Solution
UTILITY lamp (orange) not illuminated.	Utility not present.	Call qualified service personnel to restore power to socket.
	3U POD input cord not connected to utility.	Refer to 3U POD installation instructions in this manual: <ul style="list-style-type: none"> • Installation and Start-Up and • Mount the POD in the Rack.
UPS Available lamp (green) not illuminated.	UPS output power not present.	Turn on UPS. Refer to UPS user manual.
	UPS input and/or output cord not connected to 3U POD.	Refer to 3U POD installation instructions in this manual: <ul style="list-style-type: none"> • Installation and Start-Up and • Mount the POD in the Rack.
3U POD will not start some / all connected loads.	3U POD output circuit breaker has tripped.	Reset 3U POD circuit protectors.
3U POD circuit protectors trip after resetting.	Overcurrent on 3U POD socket.	Recalculate load requirements, distribute load among other 3U POD sockets.

3U POD™

USER MANUAL

The Company Behind the Products

With over a million installations around the globe, Liebert is the world leader in computer protection systems. Since its founding in 1965, Liebert has developed a complete range of support and protection systems for sensitive electronics:

- Environmental systems—close-control air conditioning from 1 to 60 tons
- Power conditioning and UPS with power ranges from 300 VA to more than 1000 kVA
- Integrated systems that provide both environmental and power protection in a single, flexible package
- Monitoring and control—from systems of any size or location, on-site or remote
- Service and support through more than 100 service centers around the world and a 24/7 Customer Response Center

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