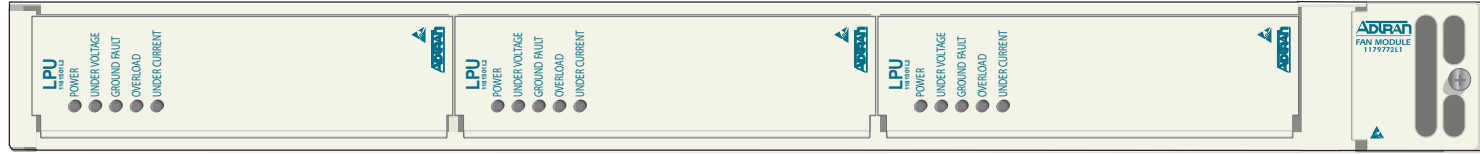


LPU Chassis

P/N 1179771L1
CLEI: SIMPED0A_



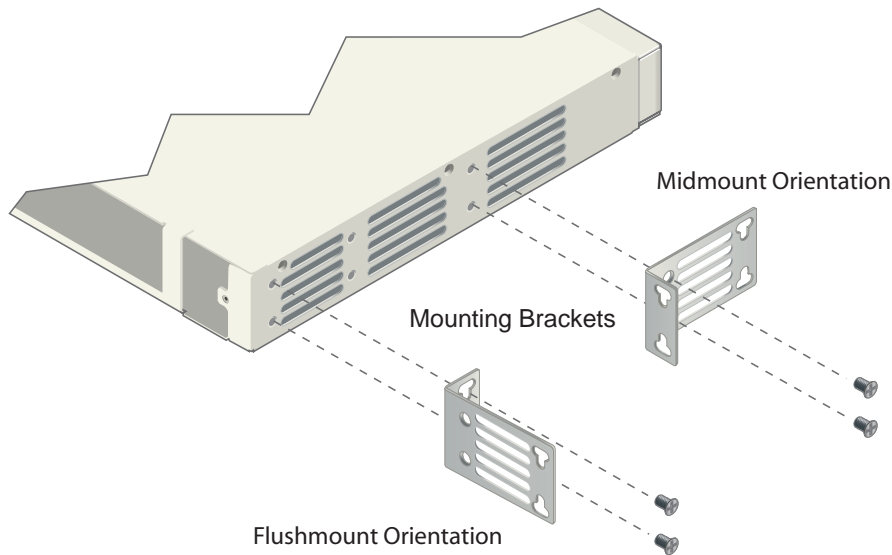
DESCRIPTION

The 3-Slot Line Power Unit (LPU) Chassis is a rack mount chassis that houses three 3192 form factor LPUs.

TURN-UP STEPS

1. Unpack the 3-Slot Line Power Unit Chassis and inspect it for damage. If damage is noted, file a claim with the carrier and then contact ADTRAN. For more information, refer to the warranty.
2. Using the appropriate screw holes for mid or flush mounting, attach the mounting brackets to the 3-Slot Line Power Unit Chassis using the screws provided for each bracket.

NOTE: Brackets with long and short flanges are provided to allow the chassis to be mounted in 19-inch or 23-inch racks.



3. Using the appropriate screws for the rack type, mount the 3-Slot Line Power Unit Chassis into the rack.

WARNING: Take care not to upset the stability of the equipment rack during installation.

4. Make frame ground connection from the frame ground terminal block on the rear panel of the chassis to the equipment rack grounding screw, using a 10, 12, or 14 gauge wire.
5. Test frame ground connection to ensure proper ground. Using an ohmmeter set to the lowest resistance range, if applicable, place one lead on the ground strap of the rack and the other lead on the chassis frame ground terminal. The reading should be less than 1 Ohm. Greater readings should be investigated.

CAUTION: Per GR-1089-CORE October 2002, Section 9, the 3-Slot Line Power Unit Chassis is designed and intended only for installation in a DC-C (common) bonding and grounding system. The chassis ground wire must be of equal or greater ampacity than the wire connected to the -48 VDC return.

The 3-Slot Line Power Unit Chassis is not intended or designed for installation in a DC-1 (isolated) bonding and grounding system.

6. Make power connections to the 3-Slot LPU.

WARNING: A readily accessible disconnect device (such as a suitably approved and rated rackmount fuse and alarm panel) should be incorporated in the fixed wiring.

Recommended fusing for this shelf is 10 amps, -48 VDC.

Connect only to a reliably grounded -48 VDC source that is electrically isolated from the AC source.

- a. Determine which fuse pair will supply power to the chassis. Remove the fuses for the pair.
 - b. Cut three lengths of appropriately sized wire to reach from the terminals on the fuse and alarm panel to the power terminals on the chassis.
 - c. Using a crimping tool, connect lugs to one end of each wire.
 - d. Using a screwdriver, connect the ends of the wires without the lugs to the terminal block by lifting the hinged cover on the rear panel labeled power. Make the proper power, return, and frame ground connections to the terminal block.
 - e. Connect the ends of the wires with lugs to the appropriate locations on the fuse and alarm panel.
7. Apply power and check voltage.

WARNING: Installing fuses in the fuse and alarm panel at this stage will provide power to the chassis. There will be power to the pins on the backplane and inside the shelf. Exercise caution to avoid electric shock.

- a. Install appropriate fuses (10 amps, -48 VDC) in the slots for the fuse and alarm panel that services the 3-Slot LPU Chassis.
- b. Using a voltmeter, place the common (normally black) lead on the "RET" post of the DC power terminal block and the DC volts (normally red) lead on the "-48V" post of the DC power terminal block. The reading should be in an operating range of -42 VDC to -56 VDC, with a nominal value of -48 VDC. Note the "-" polarity.

NOTE: The 3-Slot LPU Chassis uses a 3-Slot LPU Chassis Fan Module. For more information, refer to the "3-Slot LPU Chassis Fan Module Job Aid" (P/N 61179771L2-22).

ALARM CONNECTIONS

The 3-Slot Line Power Unit Chassis provides a connector for two alarm outputs (Fan and Fuse Alarms). The outputs provide normally open alarm connections. To make the alarm connections, perform the following procedure:

1. Cut three lengths of appropriately sized wire to reach from the terminals on the fuse alarm panel to the shelf alarm terminal block on the rear panel.
2. Lift the hinged cover on the "Alarm" Terminal Block.
3. Using a screwdriver, connect the wires to the shelf alarm terminal block to the appropriate locations on the fuse alarm panel.



CABLE PAIR CONNECTIONS

- ◆ The LPU cable pair connections are made using 25 pair cables with standard-entry female amphenol connectors. Wire gauge for the facility pairs should be appropriately sized for the maximum output current rating for the chassis plug-in modules.
- ◆ While viewing the male amphenol connectors, the pinouts are as follows:
 - ◆ Pins 1-25 run from bottom right to bottom left
 - ◆ Pins 26-50 from top right to top left
- ◆ Tip and Ring assignments are as follows:
 - ◆ Pins 1-8 are designated Ring for the LPU in slot one
 - ◆ Pins 9-16 are designated Ring for the LPU in slot two
 - ◆ Pins 17-24 are designated Ring for the LPU in slot three
 - ◆ Pins 26-33 are designated Tip for the LPU in slot one
 - ◆ Pins 34-41 are designated Tip for the LPU in slot two
 - ◆ Pins 42-49 are designated Tip for the LPU in slot three

OPERATIONAL SPECIFICATIONS

Specification	Description
Temperature	Operation: -40°C to +70°C Storage: -40°C to +85°C
Dimensions	Height: 1.75 (1U) inches Width: 17.25 inches Depth: 11.125 inches Weight: 8 pounds
Relative Humidity	Up to 95% noncondensing
Recommended Fusing	10 A

COMPLIANCE

The LPU shelf complies with NEBS Level 3 and GR-1089-CORE. The LPU shelf is NRTL listed to the UL 60950 standard. The LPU shelf is intended for installation in Restricted Access Areas only.

Code	Input	Output
Power Code (PC)	F	C
Telecommunication Code (TC)	-	X
Installation Code ((C))	A	-

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

To comply with the requirements of UL 60950 and NEBS, all empty slots are required to be provided with blank panels (P/N 1179771L3).

Changes or modifications not expressly approved by ADTRAN could void the user's authority to operate this equipment.

FACILITY OUT CONNECTOR PINOUTS

Ring	Pins	Tip
LPU1_RING1	1 26	LPU1_TIP1
LPU1_RING2	2 27	LPU1_TIP2
LPU1_RING3	3 28	LPU1_TIP3
LPU1_RING4	4 29	LPU1_TIP4
LPU1_RING5	5 30	LPU1_TIP5
LPU1_RING6	6 31	LPU1_TIP6
LPU1_RING7	7 32	LPU1_TIP7
LPU1_RING8	8 33	LPU1_TIP8
LPU2_RING1	9 34	LPU2_TIP1
LPU2_RING2	10 35	LPU2_TIP2
LPU2_RING3	11 36	LPU2_TIP3
LPU2_RING4	12 37	LPU2_TIP4
LPU2_RING5	13 38	LPU2_TIP5
LPU2_RING6	14 39	LPU2_TIP6
LPU2_RING7	15 40	LPU2_TIP7
LPU2_RING8	16 41	LPU2_TIP8
LPU3_RING1	17 42	LPU3_TIP1
LPU3_RING2	18 43	LPU3_TIP2
LPU3_RING3	19 44	LPU3_TIP3
LPU3_RING4	20 45	LPU3_TIP4
LPU3_RING5	21 46	LPU3_TIP5
LPU3_RING6	22 47	LPU3_TIP6
LPU3_RING7	23 48	LPU3_TIP7
LPU3_RING8	24 49	LPU3_TIP8
N/A	25 50	N/A