

## NETVANTA 1131 REDUNDANT/EXTENDED POWER SUPPLY

P/N 1700530F1, 1700532F1 (RPS CABLE), 1700533F1 (EPS CABLE)

### GETTING STARTED

The NetVanta 1131 RPS/EPS has three RPS outputs and one EPS output for use with RPS/EPS equipped NetVanta switches. **Important:** Refer to the NetVanta 1131 product on [www.adtran.com](http://www.adtran.com) for a list of supported switches. The RPS outputs provide redundant or backup power for a switch's internal power supply. The EPS output provides backup power for a Power over Ethernet (PoE) switch's internal PoE supply, as well as extended or supplemental power to provide full PoE for 48-port switches (up to 740 W of power).

The NetVanta 1131 does not activate RPS power until a failure is detected on the switch for which it is providing redundancy. Once RPS power is being supplied to a switch, if a second switch fails, the power will not transfer to the second switch. In the event that multiple connected switches lose power simultaneously, RPS power will be supplied to the first failed switch detected.

The NetVanta 1131 is housed in a 1U-high, metal enclosure that can be wall mounted, rack mounted singly using the rackmount brackets, or rack mounted two side by side using the optional dual mounting tray (P/N 1700534F1).

### WARNING

*The NetVanta 1131 and the NetVanta switch with which it is associated should be installed in a restricted access location as described in UL 60950-1.*

### RACK MOUNTING THE NETVANTA 1131

The NetVanta 1131 can be installed into a 19-inch equipment rack by following these steps:



- *The NetVanta 1131 is intended to be installed, maintained, and serviced by qualified service personnel only and is for use with NetVanta switches only.*
- *If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the specified 50°C maximum ambient temperature.*
- *Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.*
- *Be careful not to compromise the stability of the equipment mounting rack when installing this product.*
- *Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading the circuit might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.*
- *Reliable grounding of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).*
- *This equipment incorporates double pole/neutral fusing. If the neutral fuse opens and the line fuse does not open, voltage could still be present in the unit. Line and neutral are provided with fuses for overcurrent protection.*

## SINGLE RACKMOUNT

1. Securely fasten the rackmount brackets to the NetVanta 1131 using the screws provided with the unit. The brackets can be attached in flush mount, 2-inch mount, and mid-mount positions (see [Figure 1](#)) depending on your installation requirements. **Important!** To avoid damaging the unit when attaching the mounting brackets, use only the screws supplied with the unit.
2. To allow proper grounding, scrape the paint from the rack around the mounting holes where the unit will be positioned.
3. Position the unit in a stationary equipment rack either above or below the NetVanta switch.
4. Have an assistant hold the unit in position as you install two appropriate mounting bolts through the unit's brackets and into the equipment rack.
5. Proceed to the steps given in [Connecting the NetVanta 1131 and the NetVanta Switch](#).

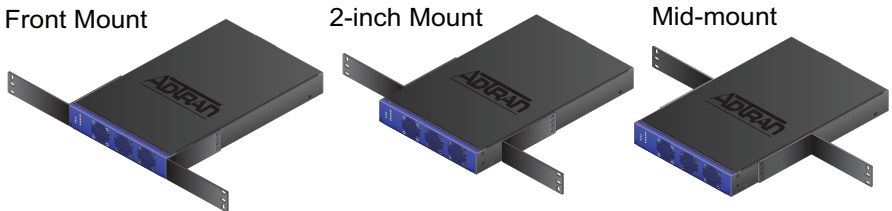


Figure 1. Rack Mounting the NetVanta 1131 Using the Brackets

## DUAL RACKMOUNT

1. Install the dual mounting tray in a stationary equipment rack using the screws provided.
2. To allow proper grounding, scrape the paint from the rack around the mounting holes where the tray will be positioned.
3. Position two NetVanta 1131 units side by side on the dual mounting tray lining up the holes in the front of the units with the holes in the tabs on the front of the tray (see [Figure 2](#)). **Important!** To avoid damaging the unit when attaching it to the dual mounting tray, use only the screws supplied with the tray.
4. Insert the provided screws through the tabs into the units securing them with a screwdriver.
5. Proceed to the steps given in [Connecting the NetVanta 1131 and the NetVanta Switch](#).

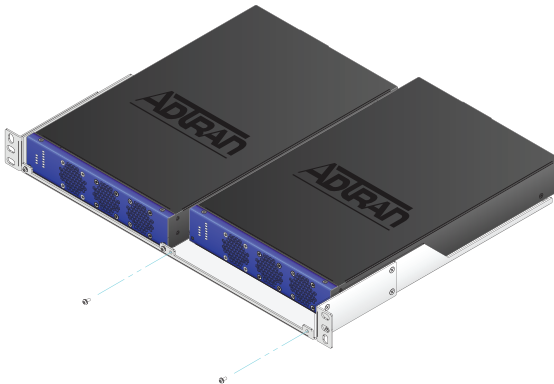


Figure 2. Rack Mounting the NetVanta 1131 Using the Dual Mounting Tray

## WALL MOUNTING THE NETVANTA 1131

The NetVanta 1131 can be mounted on a wall by following these steps:

1. Attach the wallmount brackets so that the portion with the mounting holes is flush with the bottom of the chassis.
2. Decide on a location for the unit. NetVanta 1131 units are mounted with the front panel facing left (see [Figure 3](#)). Keep in mind that the unit needs to be mounted at or above eye-level so that the LEDs are visible.
3. Prepare the mounting surface by attaching a board (typically plywood, 3/4-inch to 1-inch thick) to a wall stud using #6 to #10 (2.5-inch or greater in length) wood screws.  
**Important! To avoid damaging the unit when attaching the mounting brackets, use only the screws supplied with the unit.**
4. Have an assistant hold the unit in position as you install two #6 to #10 (1-inch or greater in length) wood screws through the unit's brackets and into the mounted board (see [Figure 3](#)).
5. Proceed to the steps given in [Connecting the NetVanta 1131 and the NetVanta Switch](#).

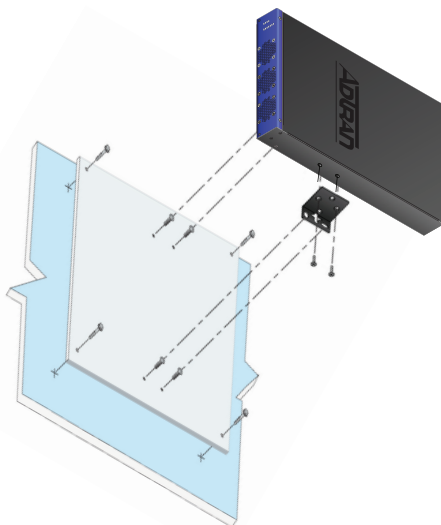


Figure 3. Wall Mounting the NetVanta 1131

## CONNECTING THE NETVANTA 1131 AND THE NETVANTA SWITCH

1. Ensure that all power sources have been removed from the NetVanta 1131 and the NetVanta switch(es) to be connected.
2. With a Phillips head screwdriver, remove the cover plates from both the NetVanta 1131 RPS/EPS receptacles and the NetVanta switch's RPS/EPS receptacles on the rear panels of the units. **Important! Do not remove the cover plates from the RPS/EPS receptacles unless you plan to use them.**
3. Insert one end of the RPS cable (P/N 1700532F1 sold separately) into a receptacle labeled **RPS1**, **RPS2**, or **RPS3** located on the rear panel of the NetVanta 1131. Press the connector until the pins are fully inserted and the base of the connector is flush with the unit.  
**Important! Do not use excessive force. If the connector does not insert easily, check to ensure you are inserting the correct connector into the unit.**
4. Insert the connector on the other end of the RPS cable into the receptacle labeled **RPS** located on the rear panel of the NetVanta switch. Press the connector until the pins are fully inserted and the base of the connector is flush with the unit.

5. If you plan to use the NetVanta 1131 as an EPS, repeat Steps 1 through 4 using the EPS cable (P/N 1700533F1 sold separately) and the receptacles labeled **EPS** located on the rear panels of the NetVanta 1131 and the NetVanta switch and an EPS cable.
6. To remove an RPS or EPS cable from the unit, pinch the sides of the connector and pull gently to release it from the receptacle.
7. Proceed to *Powering the NetVanta 1131 and the NetVanta Switch*.

## POWERING THE NETVANTA 1131 AND THE NETVANTA SWITCH

1. Plug the female end NetVanta switch's power cord (provided with the unit) into the power receptacle on the rear panel of the unit.
2. Connect the other end (3-prong plug) of the NetVanta switch's power cord to the proper 110 to 240 VAC grounded receptacle.
3. Plug the female end of the NetVanta 1131 unit's power cord (provided with the unit) into the power receptacle labeled **Power** on the rear panel of the unit.
4. Connect the other end (3-prong plug) of the unit's power cord to the proper 110 to 240 VAC grounded receptacle.



- *This unit shall be installed in accordance with Articles 300 and 400 of NEC NFPA 70.*
- *Power to the AC system must be from an appropriately rated and grounded source.*
- *Maximum recommended ambient operating temperature is 50°C.*

## LED BEHAVIORS

LED	Color	Indication
<b>Power</b>	Off	The unit is not receiving power.
	Green (solid)	The unit is receiving power.
<b>RPS ALM</b>	Off	The RPS is functioning properly.
	Red (solid)	The RPS has failed.
<b>EPS ALM</b>	Off	The EPS is functioning properly.
	Red (solid)	The EPS has failed.
<b>FAN ALM</b>	Off	The fans are functioning properly and the system temperature is acceptable.
	Red (solid)	The fans have failed.
<b>RPS CONN (1 - 3)</b>	Off	There is no connection to the switch.
	Green (solid)	There is a valid connection to the switch.
<b>RPS STAT (1 - 3)</b>	Off	Power is not being provided to the associated port.
	Amber (solid)	Power is being provided to the associated port.
	Amber (flashing)	A fault condition exists on the associated port.
<b>EPS CONN</b>	Off	There is no connection to the switch.
	Green (solid)	There is a valid connection to the switch.

## ADDITIONAL INFORMATION

For additional information about accessing and setting up the NetVanta switch, refer to the appropriate quick start guide supplied with your unit or online at <https://supportforums.adtran.com>.

For additional details on product features, specifications, installation, and safety, refer to appropriate hardware installation guide available online at <https://supportforums.adtran.com>.