## LIEBERT® vNSA™ Quick Installation Guide



#### Liebert vNSA™



The Liebert vNSA network switch connects multiple, Ethernet-ready devices. The vNSA includes two 8-port network switches with 14 usable ports, and one model includes a Liebert iCOM™ 9-in. touch-screen display to connect iCOM-equipped Thermal Management units. See the table below for details.

#### **NETWORK SWITCHING**

The two 8-port switches in the vNSA include 14 usable ports, RJ45 and support switched Ethernet networks in accordance with IEEE Standard 802.3.

The switches include autonegotiation, autopolarity, and autocrossing to eliminate the need for a crossover cable when connecting device ports. The number of Thermal Management units that you can connect depends on the vNSA model. On models with an iCOM display, a thermal-management unit can also connect to a port on the iCOM display. See the table below.

Model	iCOM display	Number of Ports	Ports required for:		Remaining available ports	Maximum number of connected units for:
	-		iCOM display connection	Upper and lower switch connection		iCOM display
vNSA14-iCOM-H	Yes	16	1	2	13	14
vNSA14	No	16	—	2	14	14

#### **PRODUCT MODELS**

# PREPARING FOR

The Liebert vNSA must be installed indoors. Choose a mounting method based on the application, location of connected devices, and the type of surface available for mounting. The mounting options are:

- Surface-mount: secured to a wall
- Recessed-mount: front flush to a wall.

Mount the vNSA where it can be easily accessed.

The site must have electrical service and must allow networkcable routing from the devices to the vNSA.

The wall material must be capable of supporting the weight of the vNSA. See the Specifications table on the previous page for weights by model number.

#### Required Equipment for Mounting

Gather the following equipment:

- Electric drill (if pilot holes are required)
- Screwdriver
- Marker or Pencil to mark hole locations
- 4 #10 screws
- Wall anchors (if surface cannot support the unit securely)

#### **Power Requirements**

The vNSA requires 100 – 240 VAC, single-phase power for proper operation. The unit contains a 12-V, 1.5-A universal power supply with a hard-wired connection for 120-V or 230-V operation.

## **MOUNTING THE vNSA**

**NOTICE:** Before installing, check building plans and other relevant documents to make sure that the mounting in selected location will not cut or otherwise damage electrical wiring, communication wiring, or pipes. **NOTE:** Remove the conduit knockouts before mounting to ease installation and prevent strain on the hardware and wall.

## 1. Mark the mounting-hole locations.

Using the back of the vNSA as a template, mark the locations for the 4 screws and drill pilot holes if necessary.

- 2. Install the top screws. The screw heads must be small enough to fit through the large hole in the mounting slot, but extend past the edges of the upper part of the slot.
- **3. Hang the unit.** Hang the unit on the installed top screws and make sure it slides down until the screws are in the upper slot, then tighten the screws until snug.
- **4. Install the bottom screws.** Insert the screws in the bottom holes on the back of the panel and tighten until snug.







## MOUNTING DIMENSIONS



### **SPECIFICATIONS**

Power Requirements	100 – 240 VAC, single-phase, 47 – 63 Hz, 0.4 A			
Dimensions, W x D x H	14.25 x 3.3 x 12 in (362 x 84 x 305 mm)			
Weight for models with Liebert iCOM	2.5 lb (6.1 kg)			
Weight for non-iCOM models	10 lb (4.5 kg)			
Enclosure Type	NEMA 1, painted steel IP20—indoor use			
Mounting Surface	Building wall or structural member			
Communication	Ethernet 10/100 Mbps RJ45 pors, autonegations, autopolarity, autocrossing			
Ambient Operating Environment	32°F – 140°F (0°C – 60°C); 0% to 95% relative humidity, non-condensing			
WIRING SPECIFICATIONS				
Ethernet 10/100 Mbps connection	CAT5, RJ45 Ethernet cable, max. length: 328 ft (100 m), Rating: N/A			
Universal power-supply connection	16-AWG stranded max length: Contact local electrician Rating: 300 V			

## **CONNECTING POWER**

**WARNING:** Risk of electric shock. Can cause injury or death. Disconnect all local and remote power supplies before working within the unit.

**NOTICE:** The vNSA requires properly-grounded (earthed) 100 – 240 VAC, single-phase power, 50 Hz or 60 Hz. The ground wire for the power lead must be wired to the earth ground terminal stud located next to the universal power supply.

This equipment must be installed by a qualified and certified electrician who must review and approve customer-supplied wiring and circuit breakers and verify correct input and grounded (earthed) connections to ensure compliance with technical standards and national and local electrical codes The vNSA includes a power supply with an adapter that must be wired for the power connection.

**NOTE:** Unplug the connector prior to installation. You may use a field-supplied power cord in place of the provided hardwire adapter.

**NOTE:** The maximum wire size is 16 AWG stranded.

- 1. Connect the ground wire. Locate the earth-ground terminal inside the vNSA enclosure and connect the incoming electrical-service ground wire to the ground terminal.
- 2. Remove the adapter cover.

Loosen the screw on the adapter cover and remove the cover.

- **3. Remove the wire clamp.** Loosen the screws in the wire clamp and remove the clamp.
- **4. Secure wires in adapter.** Feed the wires through the rubber grommet including the



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- N = Neutral for 120-V applications or Line for 220-V applications (white wire)
- E = Earth ground, from the earth-ground terminal (green wire)
- L = Line (black wire)
- 5. Replace adapter cover. Replace the wire clamp and secure it with the 2 screws, then replace the adapter cover and tight the screw.

#### **CONNECTING TO VNSA**

To connect devices to vNSA, use CAT5 (or better) with RJ45 connectors.







Cover screw



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