TrueNAS® R20A

Version 1.1

R20A

The R20A is a 2U Hybrid Storage Array that has 12 3.5" drive bays and 2 SSD drive bays, redundant power supplies, and a single TrueNAS controller. It is provided as an alternate form factor to the R20. These instructions cover those procedures that are specific to the R20A. Additional R-Series setup instructions are provided in the R-Series Basic Setup Guide.

You will find these items when opening the R20A packaging:

R20A Components

R20A Hybrid Storage Array

Locking Bezel

Set of rackmount rails with mounting hardware

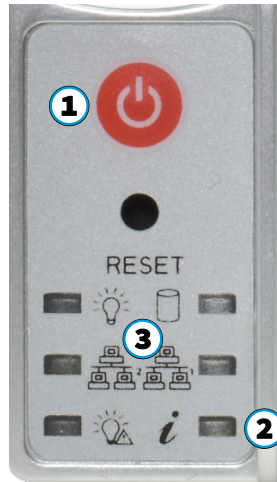12 3.5" drive trays with up to 12 hard drives installed

2 SSD drive trays with up to 2 SSDs installed

Accessory kit with 2 IEC C13 to NEMA 5-15P power cords, 2 IEC C13 to C14 cords, and a set of velcro cable ties
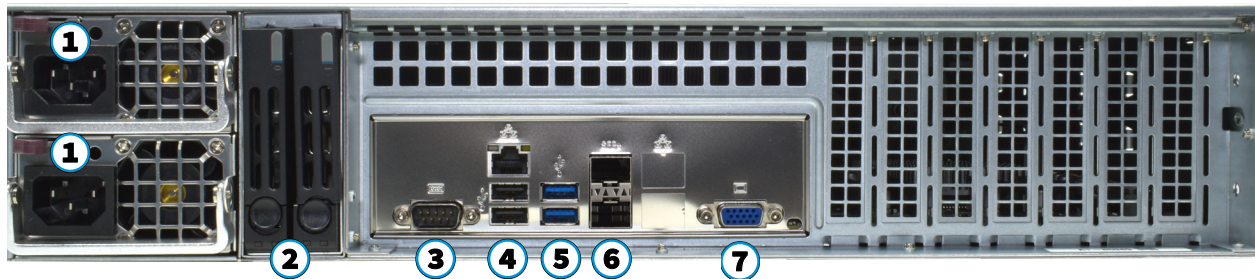
Ports and Indicators

R20A buttons and indicators are located on the left "ear" of the system front.

The **left** ear has lighted buttons for power (**1**) and system ID (**2**). There are also fault and network activity (**3**) indicators. Both ears have screw holes for securing the system to a rack.

The fault indicator is on during the initial power-on self-test (POST) and off during normal operation. It also turns on if the TrueNAS software issues an alert. For details about software alerts and how to configure them, see "Alerts" in the TrueNAS Documentation Hub (https://www.truenas.com/docs/).

The back panel has the power supplies and connection ports:

1. Power supplies #1 and #2
2. SSD Drive Bays
3. Serial port
4. 1Gb Ethernet Out of Band Management port and two USB 2.0 ports
5. Two USB 3.0 ports
6. Two 10Gb SFP+ networking ports
7. VGA monitor port

Racking the R20A

Drives should only be installed in a system after it has been placed in the rack. It is also recommended to remove all installed drives **before** unracking a system.
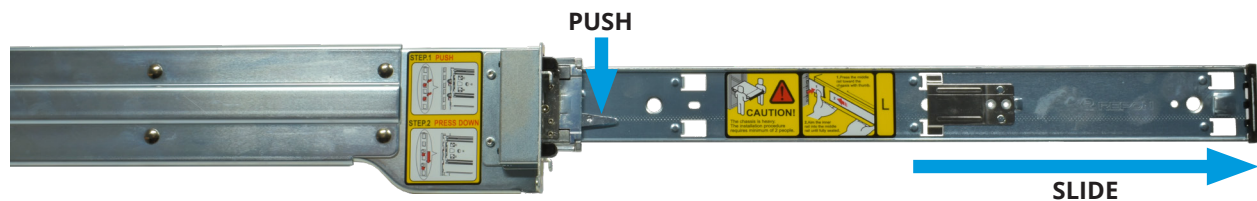
Always team-lift a system when installing to a rack.

Rack Requirements

The R20A requires an EIA-310 compliant rack. To properly install the rack rails, the front and rear vertical rack posts need to be spaced between **23" - 35.75" (584mm-908mm)** apart.

Attach the Chassis Rails

Each rail has two components, the outer rack rail and the inner chassis rail. To protect it during shipping, the chassis rail is inserted into the rack rail and must be removed before attaching to a system. Slide the chassis rail forward until the metal catch stops it in place. Push in the catch and continue to slide the chassis rail forward until it is free of the rack rail.

PUSH

SLIDE

Take the chassis rail and align the closed end toward the front of the system. Fit the rail tab holes over the mounting tabs on the side of the system and slide it into place. Use one of the included short M4 screws to secure the rail to the system.
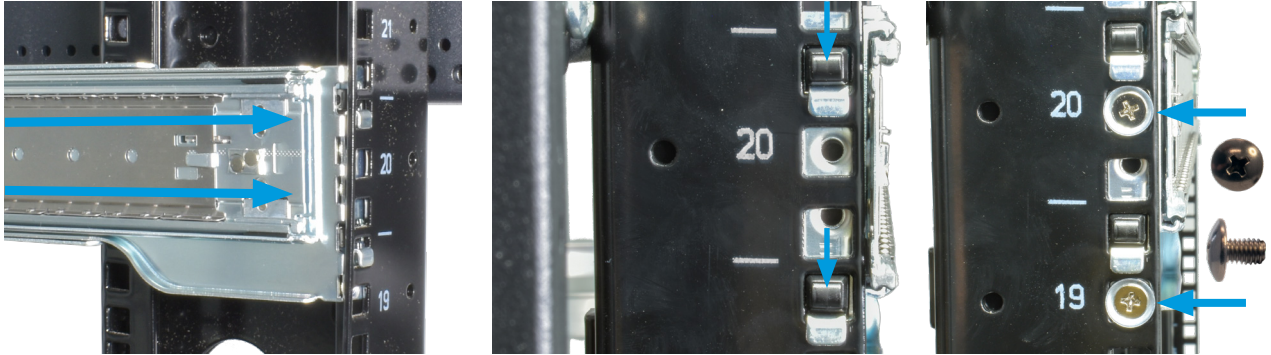
Short M4 Screw

Follow this procedure to slide out and attach the second chassis rail to the other side of the system.

Install the Rack Rails

Before installing the rack rail, make sure the rack has enough space for the system. The R20A needs 2U of rack space, with the rack rails installed into the bottom 1U.

Take a rack rail and align the end with the yellow instructional sticker with the front of the rack. The yellow instructional sticker must be facing **outside** the rack so the chassis rails can slide into the rack rails. Align the rail front tabs and black retaining buttons just above the rack attach points and push the rail into the attach points until the black buttons are fully depressed, then slide the rail tabs into the attach points. Use two of the small screws with flush washers to secure the rail to the rack.

The rail kit also includes four retention screw hole extenders that can be screwed into the middle rail attach point.

With the front of the rail installed, extend the back of the rack rail towards the equivalent attach points on the rear rack post. Make sure the rail remains level from front to back. Follow this process to install the other rack rail.

Push the System into the Rack

Team-lift the system and align the chassis rails with the rack rails. Slide the ends of the chassis rails into the rack rails and push the system forward until the metal safety catches click into place. Push the safety catches down and continue to push the system forward until it is flush with the front of the rack.
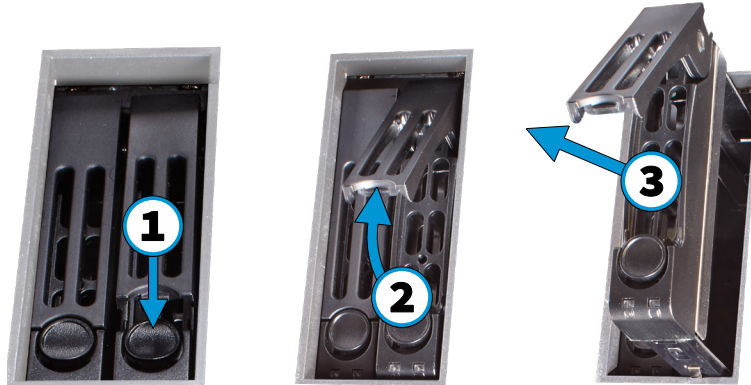

The rail kit includes additional M5 screws that can be used to secure the system to the rack rails.
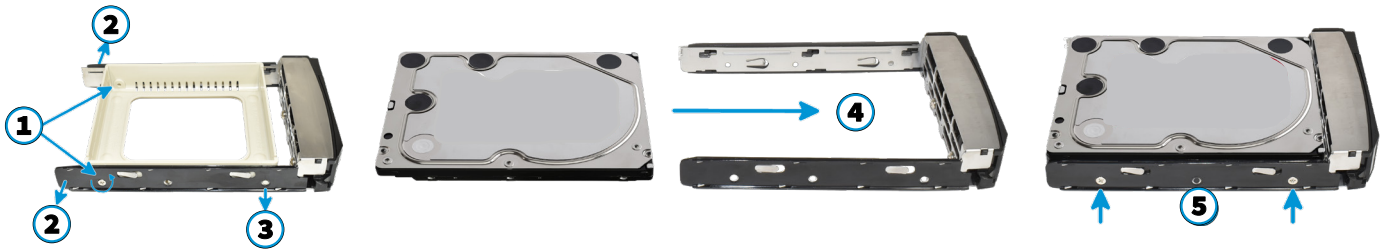
SSD Drive Trays

The R20A has two 2.5" SSD drive bays.

To remove the tray, release the latch by sliding the button down (**1**). Gently swing the latch up (**2**), then slide the tray out (**3**).
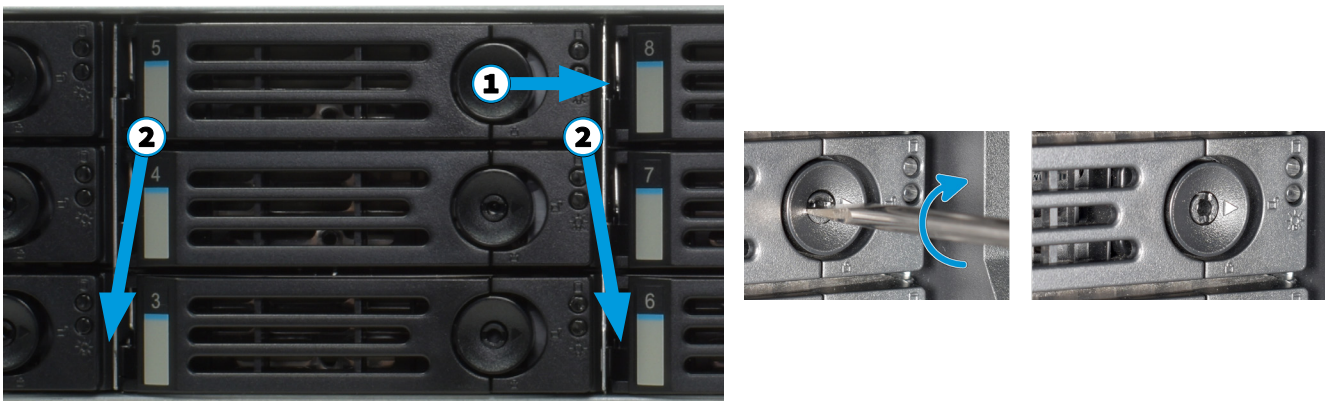

Hard Drive Trays

To mount a hard drive in a tray, remove the two rear screws holding the filler (**1**). Gently spread both sides of the tray away from the filler (**2**) until the pins release (**3**), then remove the filler. Place the hard drive into the tray (**4**) and mount the hard drive in the tray with four screws (**5**).

To remove a drive, release the latch by pushing the large circular button to the right (**1**). Once the latch swings outward, pull on it to begin sliding the tray out. Grip the top and bottom of the tray and gently remove it (**2**).

To install a hard drive tray into a system, push the tray into a slot until the locking arm begins to swing closed. Gently push the arm into place to seat the tray and secure it in the system.

Drive tray buttons can be locked to prevent tray removal. The tray button is unlocked when the slot is horizontal and locked when the slot is vertical. Lock a tray button by inserting a flat-head screwdriver into the slot in the center of the button and gently turn it ninety degrees clockwise so the slot is vertical.