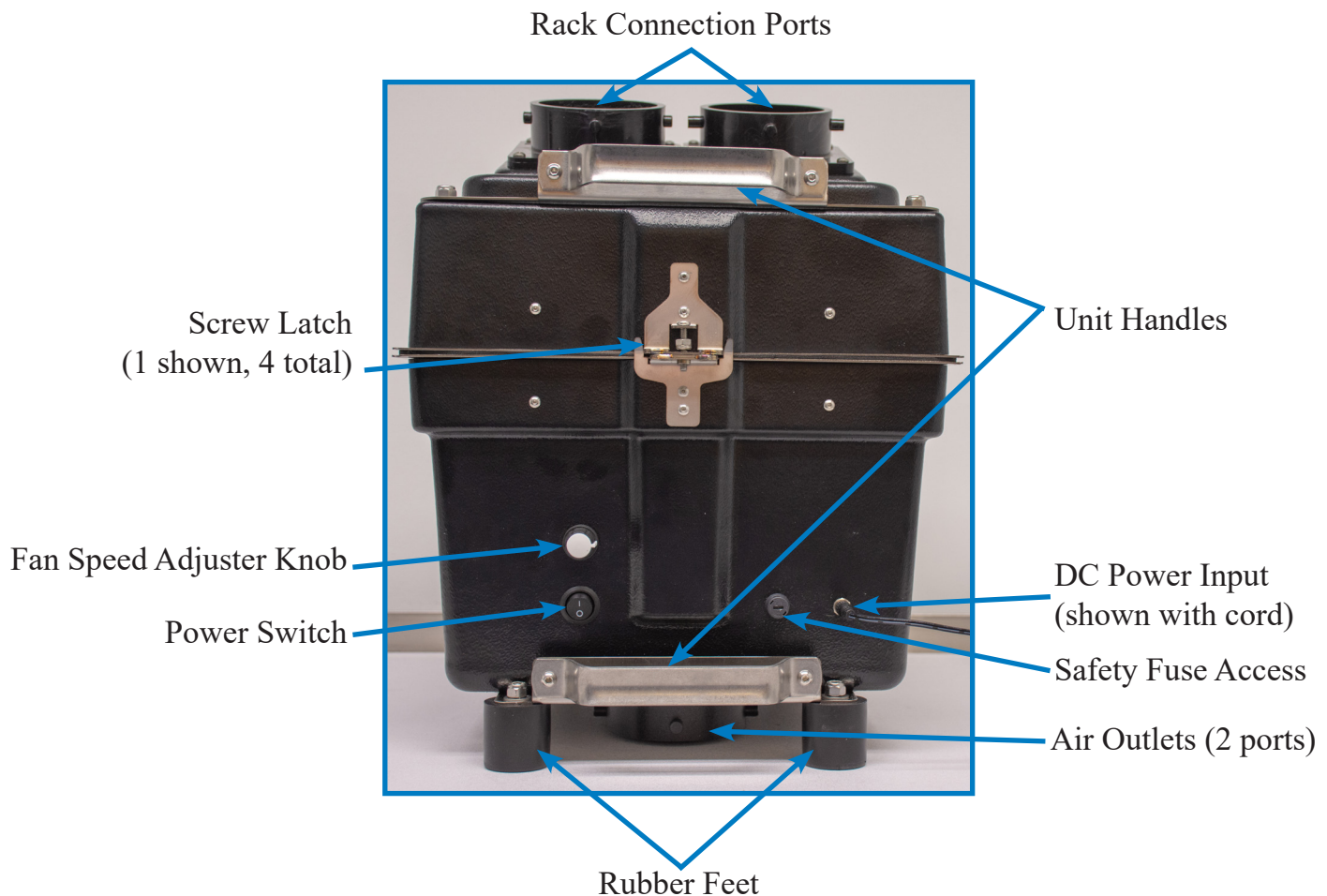# General Opti Rack
SOP - Booster Fan

Introduction

The booster fan (Part No. 83200) is a self-contained HEPA ventilation unit that provides exhaust ventilation for a single Animal Care Systems rack of any type. It is powered by a low-voltage external power supply compatible with any standard AC voltage. The booster fan features two inlet ports, compatible with standard hose connectors used with all of Animal Care Systems racks and hoses. The exhaust outlet ports also feature connectors for optional connection to building exhaust in low-flow situations or for a secondary filtration system.

Contact Animal Care Systems for more information regarding connection using the booster fan's exhaust outlet ports. The major components of the booster fan are identified in the photos below.
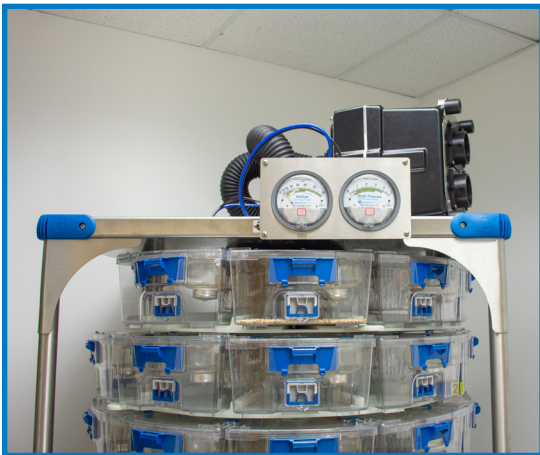
Diagram

Rack Connection Ports

Screw Latch
(1 shown, 4 total)

Unit Handles

Fan Speed Adjuster Knob

DC Power Input
(shown with cord)

Power Switch

Safety Fuse Access
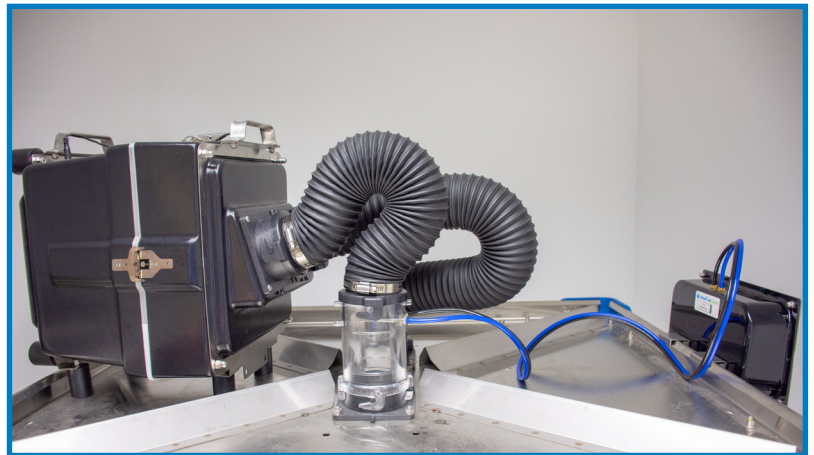
Air Outlets (2 ports)

Rubber Feet

Installation

1. Lock the two brake casters. Use a ladder to access the top of the rack; do not attempt to tip the rack to access the top of the rack.
2. Place the booster fan atop the rack so that the ports are on the side of the unit facing the central plenum; ensure the four rubber are sitting flat against the top panel of the rack so the unit cannot rock back and forth. Ensure the rack connection ports and air outlets are not blocked.
3. Connect the rack status monitor clear-view adapter or anemometer to the top of the rack; for the rack status monitor, verify it has been calibrated prior to operation (consult Page 2 of this the monitor procedure).
4. Connect one of the flexible exhaust hoses to the rack and the other to the clear-view adapter; connect both hoses to the inlet side of the booster fan interface; ensure both hoses are securely connected.
5. Connect the power supply to the booster fan via the DC power jack.
6. Connect the power supply to AC power using the included power cord; longer power cords are available, if necessary. **Use only the supplied 24V power supply to power the booster fan.**
7. Use the power switch to power on the booster fan.
8. Twist the fan speed adjuster knob to set the proper airflow.

Please refer to the wall-mounting instructions if you have a wall-mounting booster fan.

Top-mounted booster fan
with rack status monitor

Rack top view

⚠️ **Using any other power supplies to power the fan will void the booster fan warranty.**

Airflow

Please follow the airflow guideline table below to ensure your rack received proper airflow.

Rack Type	Recommended Airflow (cubic feet per minute)	Anemometer Airflow (meters per second)
Optimice	23	4.0
Optirat GenII	26	4.9
Optirat Plus	26	4.9