Vertiv™ SwitchAir™

Airflow Management Solution
for Network Equipment

SwitchAir®

At Vertiv we believe that being mindful of product design, development, use, and disposal are important to the longevity of our industry.

Checkout these environmentally conscious features of the Vertiv™ SwitchAir™:

- Improves energy efficiency by preventing hot air recirculation
- Reduced networking equipment failure rate to extend device life

Product Types

Passive SwitchAir

Passive SwitchAirs provide a dedicated path for cool air to flow to the air intake of the network switch.

Active SwitchAir

Active SwitchAirs utilize internal fans to pull cool air from the front of the cabinet to the air intake of the network switch.

Product Features

Targeted Airflow

- Provides a path for cool air to flow to the intake of network switch equipment.

Airflow Management

- Creates a barrier to effectively prevent hot exhaust air from entering switch intakes.

Fast Installation

- Easily install the SwitchAir into the front of the cabinet in the same U space as the network switch equipment.
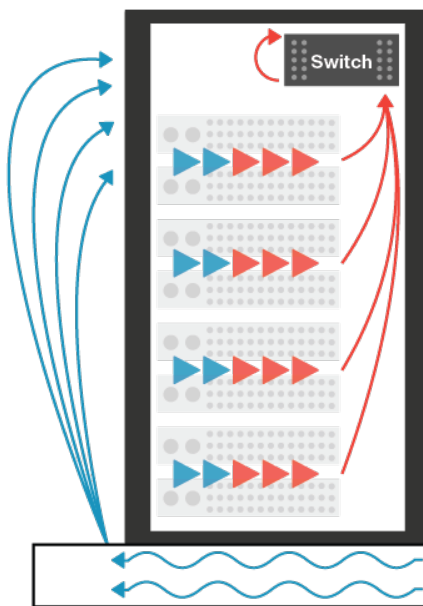
Easy Selection

- Utilize the SwitchAir Finder to identify the SwitchAir with the airflow pattern needed for installed network equipment.
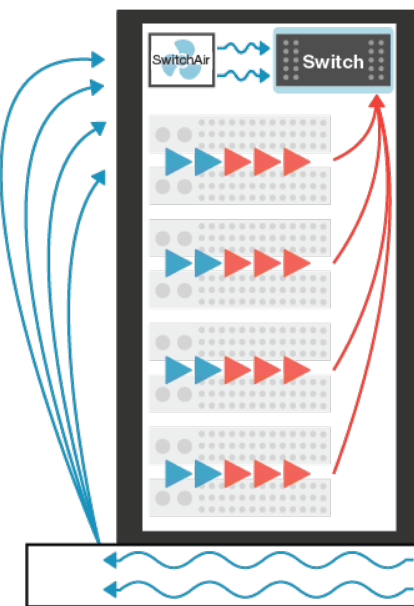
Say Goodbye to Overheated Switches

Vertiv™ SwitchAir™ Cooling

Network switches, load balancers and routers typically sit at the top and back portion of the rack. In a traditional Hot Aisle / Cold Aisle data center design, this placement makes it difficult for cold air to flow from the front of the rack to the air intakes of network switch equipment increasing chances of failure over time. If network equipment begins to overheat, blanking panels are commonly removed from the front of the rack in an effort to provide cool air to the device. This ultimately results in recirculation of hot air into the cold aisle potentially increasing the intake temperature of other devices in the rack.

The Vertiv SwitchAir replaces the blanking panel and provides a path for cool air to flow from the front of the rack to the air intakes regardless of where the equipment is mounted.

Network switches mounted at the top and rear of the rack are susceptible to heated air from the servers. This hot air is recirculated, putting stress on the device.

SwitchAir products direct cool air to the network switches, significantly lowering operating temperatures.

Vertiv™ SwitchAir™ SA1-01002
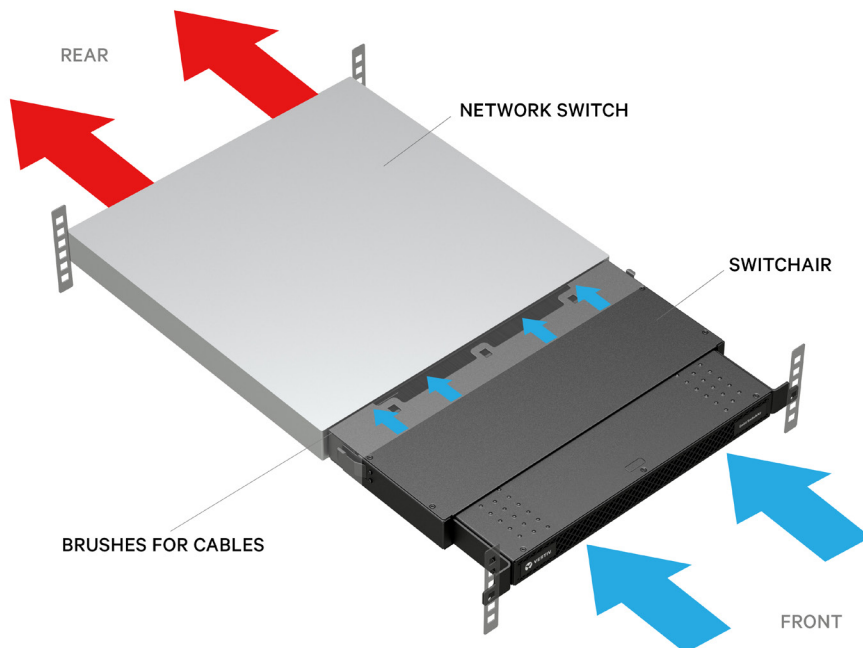
Vertiv™ SwitchAir™ for Every Switch

MODEL #	CATEGORY	SWITCH AIRFLOW PATH	PROFILE	AVAILABILITY	AIRFLOW VOLUME
SA1-01001NB	Passive	Dual Side Intake	1U	Built-to-Order	N/A
SA1-01001SS	Passive	Single Side Intake	1U	Built-to-Order	N/A
SA1-01002	Passive	Rear intake - Front Exhaust	1U	Stocked	N/A
SA1-01002L	Passive	Rear intake - Front Exhaust	1U	Stocked	N/A
SA1-01002S	Passive	Rear intake - Front Exhaust	1U	Stocked	N/A
SA1-01002XLNB	Passive	Rear intake - Front Exhaust	1U	Stocked	N/A
SA1-02003	Passive	Rear intake - Front Exhaust	2U	Built-to-Order	N/A
SA1-02003XS	Passive	Rear Intake	2U	Built-to-Order	N/A
SA1-02005	Passive	Side Intake	2U	Built-to-Order	N/A
SA1-03001	Passive	Side Intake	3U	Built-to-Order	N/A
SA1-09001	Passive	Side Exhaust Deflector	9U	Built-to-Order	N/A
SA2-002	Active	Side Intake or Rear Intake	2U	Built-to-Order	47 CFM
SA2-003	Active	Single Side Intake	2U	Built-to-Order	47 CFM
SA2-004	Active	Front Intake	2U	Built-to-Order	94 CFM
SA2-006	Active	Side Intake Core Switch	2U	Built-to-Order	188 CFM

Which SwitchAir is right for your switch?

The SwitchAir provides cooling solutions for a wide range of switches and airflow configurations. To determine the SwitchAir that is right for your device, visit the SwitchAir Finder at www.Vertiv.com.

If you are unable to find your specific switch model, contact a local Vertiv sales representative for assistance.

How it Works

REAR

NETWORK SWITCH

SWITCHAIR

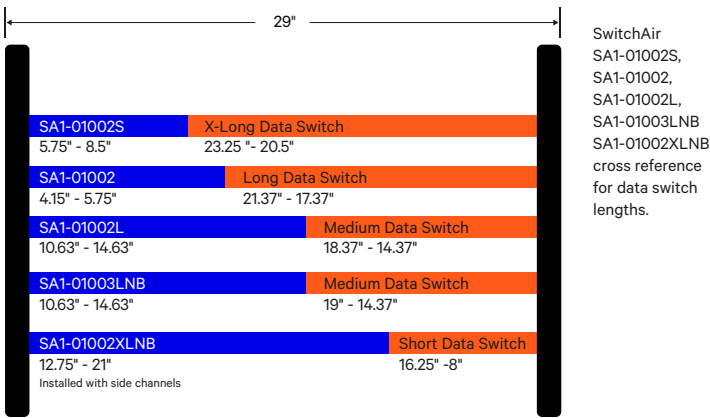BRUSHES FOR CABLES

FRONT

Availability

Stocked

The most popular SwitchAir models are stocked by a variety of distribution partners for immediate availability.
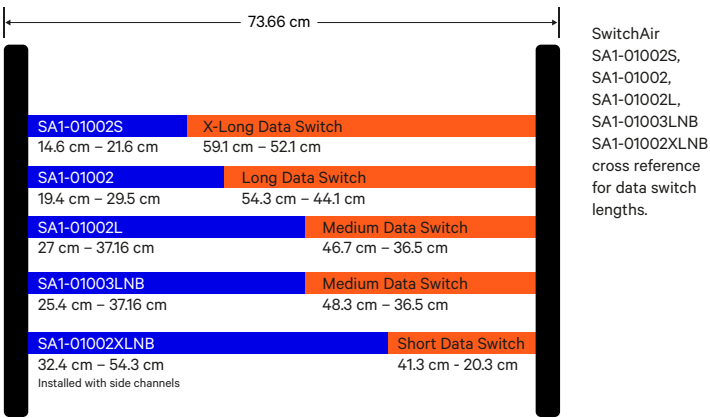
Built-to-Order

If your switch airflow path requires a Built-to-Order unit, please contact your preferred distribution partner for purchase.
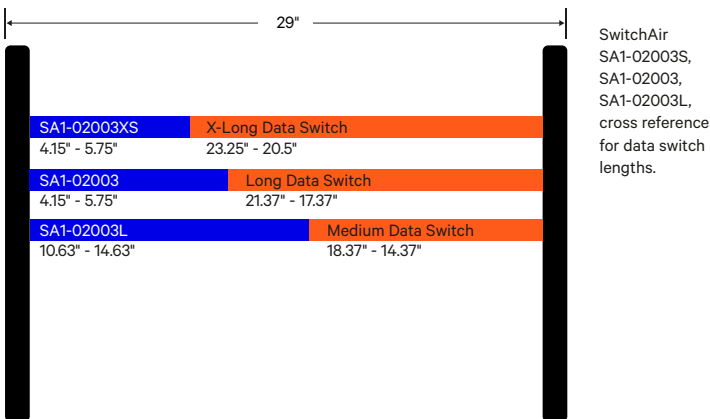
Calculate your SwitchAir

1U Height switch air cross reference guide

29"		
SA1-01002S	X-Long Data Switch	
5.75" - 8.5"	23.25 "- 20.5"	
SA1-01002	Long Data Switch	
4.15" - 5.75"	21.37" - 17.37"	
SA1-01002L	Medium Data Switch	
10.63" - 14.63"	18.37" - 14.37"	
SA1-01003LNB	Medium Data Switch	
10.63" - 14.63"	19" - 14.37"	
SA1-01002XLNB		Short Data Switch
12.75" - 21"		16.25" -8"
Installed with side channels		

SwitchAir SA1-01002S, SA1-01002, SA1-01002L, SA1-01003LNB SA1-01002XLNB cross reference for data switch lengths.

1U Height switch air cross reference guide

73.66 cm		
SA1-01002S	X-Long Data Switch	
14.6 cm – 21.6 cm	59.1 cm – 52.1 cm	
SA1-01002	Long Data Switch	
19.4 cm – 29.5 cm	54.3 cm – 44.1 cm	
SA1-01002L	Medium Data Switch	
27 cm – 37.16 cm	46.7 cm – 36.5 cm	
SA1-01003LNB	Medium Data Switch	
25.4 cm – 37.16 cm	48.3 cm – 36.5 cm	
SA1-01002XLNB		Short Data Switch
32.4 cm – 54.3 cm		41.3 cm - 20.3 cm
Installed with side channels		

SwitchAir SA1-01002S, SA1-01002, SA1-01002L, SA1-01003LNB SA1-01002XLNB cross reference for data switch lengths.

2U Height switch air cross reference guide

29"		
SA1-02003XS	X-Long Data Switch	
4.15" - 5.75"	23.25" - 20.5"	
SA1-02003	Long Data Switch	
4.15" - 5.75"	21.37" - 17.37"	
SA1-02003L	Medium Data Switch	
10.63" - 14.63"	18.37" - 14.37"	

SwitchAir SA1-02003S, SA1-02003, SA1-02003L, cross reference for data switch lengths.

2U Height switch air cross reference guide

73.66 cm		
SA1-02003XS	X-Long Data Switch	
14.6 cm – 21.6 cm	59.1 cm – 52.1 cm	
SA1-02003	Long Data Switch	
19.4 cm – 29.5 cm	54.3 cm – 44.1 cm	
SA1-02003L	Medium Data Switch	
27 cm – 37.16 cm	46.7 cm – 36.5 cm	

SwitchAir SA1-02003S, SA1-02003, SA1-02003L, cross reference for data switch lengths.