Thermal Inlet Duct for the Cisco^ Nexus 7004 Switch for Net-Access™ N-Type Cabinets

PANDUIT®

SPECIFICATION SHEET

specifications

The thermal inlet duct shall be designed to be compatible with the Cisco^ Nexus 7004 switch using Computational Fluid Dynamics (CFD) modeling and verified via operational testing. The inlet duct shall consist of one (2 RU) inlet duct and a side duct to feed cool air from the cold aisle to the switch's side inlet and prevent hot exhaust recirculation. The modular duct shall be capable of being installed in a retro-fit application without disrupting existing in-cabinet equipment and cabling.

technical information

Dimensions:	14.78"H x 20.87"W x 24.25"D (375mm x 530mm x 616mm)

key features and benefits

Passive airflow	No additional moving parts or power required for a more reliable, efficient, economical and environmentally friendly system
Performance	Designed and validated thermal performance by Panduit
Physical separation between inlet and exhaust airflow	Segregates inlet and exhaust airflow preventing hot air recirculation, reducing inlet temperatures up to 17°C (30°F) in containment applications
Inlet duct design	Ensures the cabinet is containment ready for vertical exhaust ducting (VED) and aisle containment
Maximized space utilization	Allows the switch to be deployed in 800mm and 700mm wide Panduit cabinets without sacrificing thermal performance
Energy efficiency	Provides cool air to the switch resulting in lower fan speed, reducing fan power consumption
Day one or two installation	Eliminates the requirement to replace or disturb existing cabinets, equipment and infrastructure decreasing capital expenditures and minimizing risks
Easy access	Allows access to the power supplies and fan modules minimizing network downtime
Integral bonding to cabinet	Cabinets and accessories are single-point bonded, providing a safe and reliable network, while reducing installation costs

applications

Cisco^ Nexus 7000 series switches are a modular switching system designed to deliver 10 Gigabit Ethernet and beyond.

Panduit has developed a comprehensive physical infrastructure solution for the Nexus 7004 switch platform.

When the Cisco^ Nexus 7004 switch is used as an access layer switch, it could be deployed using a Panduit Pod strategy that employs an End of Row (EoR) or Middle of Row (MoR) physical topology in the Equipment Distribution Area (EDA) of the data center. If deployed as an aggregation or core switch, it could be located in the Main Distribution Area (MDA) of the data center.

By providing a path for cool air to the switch, data center temperature set points can be raised, resulting in higher energy efficiencies and lower operating costs.

^Cisco is a registered trademark of Cisco Technology, Inc.

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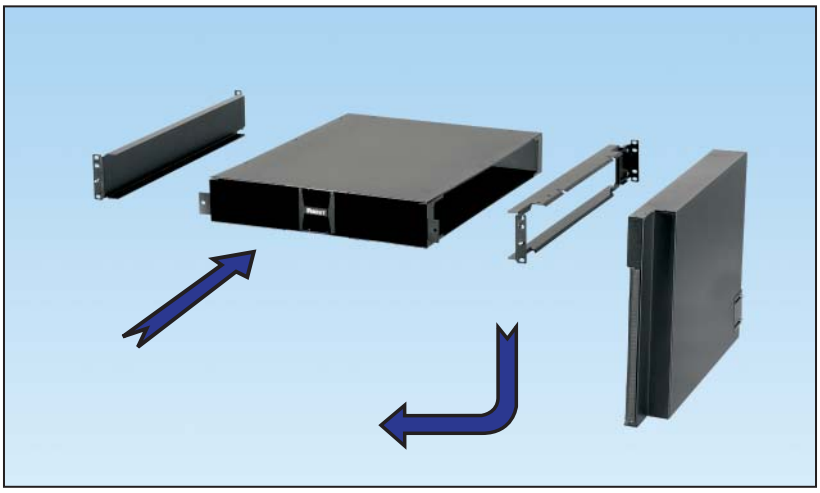
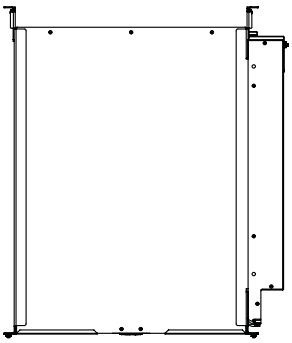
Inlet Duct for End of Row (EoR) Switching Applications	
Inlet duct:	DIRBB2007S21W
Net-Access™ N-Type Cabinets for Use in Hot Aisle/Cold Aisle Applications*	
800mm W x 42 RU x 1070mm D:	N821*^
800mm W x 42 RU x 1200mm D:	N822*^
800mm W x 45 RU x 1070mm D:	N851*^
800mm W x 45 RU x 1200mm D:	N852*^
800mm W x 48 RU x 1070mm D:	N881*^
800mm W x 48 RU x 1200mm D:	N882*^
Net-Access™ N-Type Cabinet Accessories	
Net-Access™ N-Type Vertical Blanking Panels with pass-through holes for cabinets 42 RU through 48 RU:	NVBP
Net-Access™ N-Type Cabinets for Use with Vertical Exhaust Ducting	
800mm x 45 RU x 1200mm 45 RU, front dual hinge door, rear solid split doors, cage nut rails, vertical blanking panels, cable management vertical exhaust duct ready:	N8529^Y
45 RU, front dual hinge door, rear solid split doors, (1) side panel, cage nut rails, vertical blanking panels, cable management vertical exhaust duct ready:	N8521^Y
45 RU, front dual hinge door, rear solid split doors, 12-24 tapped rails, vertical blanking panels, cable management vertical exhaust duct ready:	N8229^N
45 RU, front dual hinge door, rear solid split doors, (1) side panel, 12-24 tapped rails, vertical blanking panels, cable management vertical exhaust duct ready:	N8221^N
Vertical Exhaust Ducting for 800mm W Net-Access™ N-Type Cabinets	
16" up to 26"H:	C2VED08I1626^1
26" up to 38"H:	C2VED08I2638^1
38" up to 66"H:	C2VED08I3866^1
Net-Access™ N-Type Cabinets for Use in Cold Aisle Containment Applications	
800mm W x 42 RU x 1070mm D:	N821*^U
800mm W x 42 RU x 1200mm D:	N822*^M
800mm W x 45 RU x 1070mm D:	N851*^U
800mm W x 45 RU x 1200mm D:	N852*^U
Net-Contain™ Sliding Door Low Profile Cold Aisle Containment System	
Integral low profile ceiling structures Net-Access™ 800mm Cabinets	
4' (1200mm) aisle width:	C2CAC08F04IR^1
6' (1800mm) aisle width:	C2CAC08F06IR^1
End of row dual sliding doors	
6" (1800mm) aisle width:	C2CACT5F06SD^1
4" (1200mm) aisle width:	C2CACT5F04SD^1
Wall panel (800mm):	C2CAC08F08WP^1

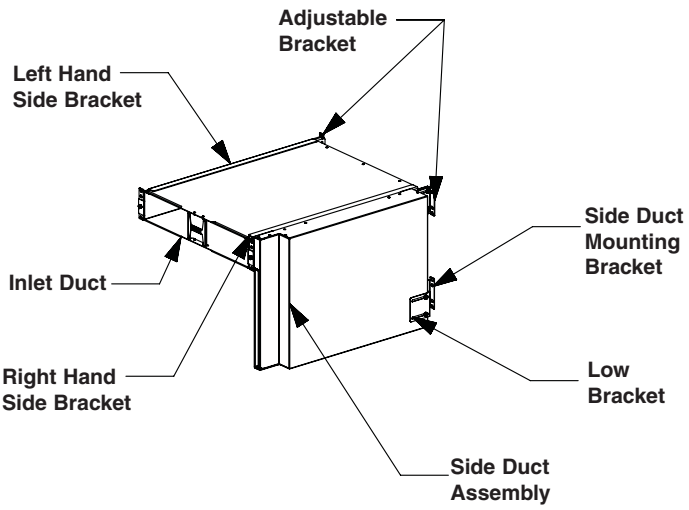
*Indicates Net-Access™ N-Type Cabinet Standard Side Panel (screw on).
Replace * with: 1 = 1 side panel, 2 = 2 side panels, or 9 = no side panels.
^Indicates optional colors.
Replace ^ with: B = Black or W = White.

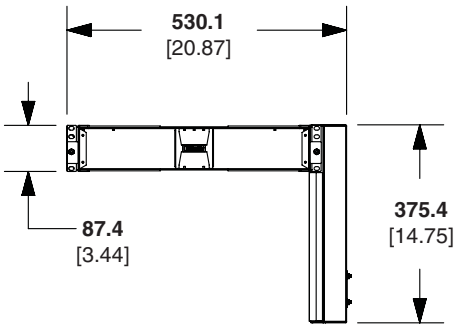
Thermal Inlet Duct for the Cisco^ Nexus 7004 Switch for Net-Access™ N-Type Cabinets

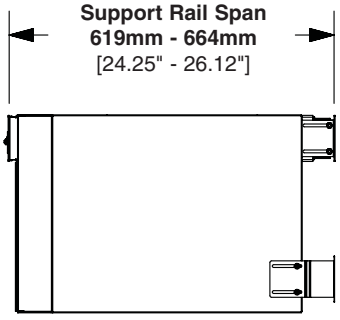


Inlet Duct Exploded View Showing Inlet Airflow Path









Dimensions are in metric. [Dimensions in brackets are inches].

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RKSP127--WW-ENG
4/2013