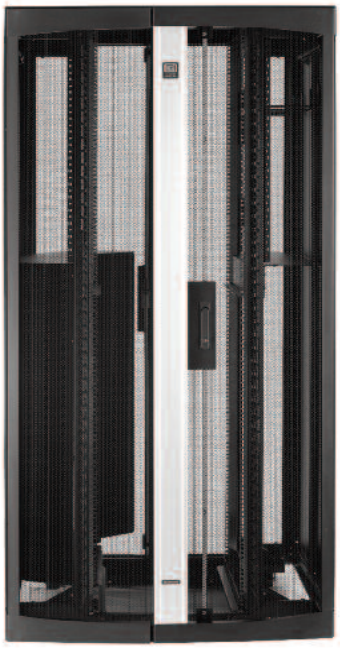
Frequently Asked Questions

N-SERIES TERAFRAME® NETWORK CABINET FOR THE CISCO® NEXUS 7018 SWITCH



Q. What special installation requirements for the Cisco Nexus 7018 switch does the the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch meet?

A. The N-Series Teraframe Network Cabinet for the Cisco Nexus 7018 Switch is an equipment storage cabinet engineered specifically to meet the special installation requirements of the Cisco Nexus 7018 switch. The Cisco Nexus 7018 Switch is a large modular network switch that uses side-to-side airflow to cool I/O modules. In the Cisco Nexus 7000 Series Site Preparation Guide, Cisco recommends support in a four-post 19"EIA rack with 11 inches (279 mm) of clearance along both sides of the switch for inlet and exhaust airflow and recommends the use of airflow baffles inside a cabinet to control airflow and prevent hot air recirculation through the switch. Additionally, I/O cables enter the switch from the side, but must not block airflow to the right side air inlets on the switch. The rack/cabinet must be able to support the switch and provide unobstructed airflow and a well-defined cable pathway. The N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch features an offset frame design that provides the required additional internal space for airflow and cables. The internal frame is 23.6 inches wide (600 mm) and includes two pairs of 19"EIA mounting rails to provide front and rear support for the switch. The surrounding cabinet is 40 inches wide (1016 mm) providing the required 11 inches (279 mm) of additional space along each side of the switch. The cabinet includes an internal Network Switch Exhaust Duct with diffuser and visor that guides cold air to the right side air intake on the switch and captures and removes hot exhaust air from the cabinet as it exits the left side of the switch. T-shaped Cable Management Fingers along the front of the inner frame provide cable management at each rack-mount unit to help organize patch cords and jumper cables as they exit the switch. The additional internal space inside the cabinet allows cables to exit the left side of the switch only to provide unobstructed airflow to the right side of the switch. Large, brush-sealed cable openings along the top sides of the cabinet provide easy cable access for the large volume of network cables and perforated double doors allowing front-to-rear airflow through the cabinet.

Q. Can you place two Cisco Nexus 7018 Switches in the Nx5 Cabinet?

A. No, the cabinets are only available in 42U and 45U heights. Each Cisco Nexus 7018 Switch requires 25U. A cabinet that supports two switches would need to be a minimum of 50U. However, you can install patch panels and fiber enclosures or other equipment at the top of the cabinet.

Q. How is the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch different than other N-Series Cabinets?

A. The N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch is wider and heaver than the other N-Series Cabinets, uses a different style of inner frame to support equipment, uses a different style of standoff brackets to support the doors and side panels, and has a larger interior space between the side panels, front door and the inner frame. Only the front door and side panels are offset from the inner frame. The rear door is not offset as it is on other N-Series Cabinets. The frame has sliding rail supports like the F-Series TeraFrame Cabinet System. Rails do not slide on other N-Series Cabinets. However, the rails are fixed in position 29.8 inches (756 mm) apart. There is a four-piece top panel with large brush-sealed openings along the sides instead of a five-

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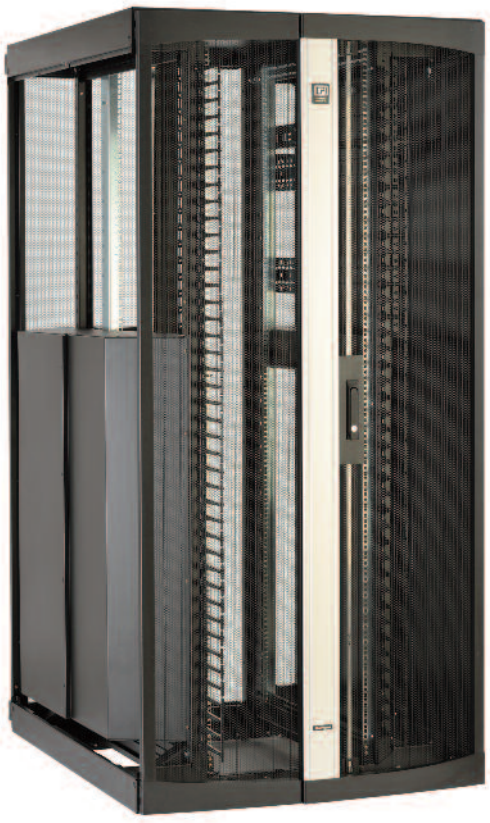
piece top panel with knockouts. There is a double (vertically split) front door instead of a single front door. There are two-piece side panels instead of a single-piece side panel and the side panels attach to a top and bottom skirt that is part of the frame instead of the standoff brackets. The internal Network Switch Exhaust Duct is not the full height of the cabinet. It is sized to match a Nexus 7018 switch and is pre-installed in the bottom 25U of the cabinet, but can be moved to align with another rack-mount unit location if necessary. There is a visor on the air intake side of the cabinet that blocks airflow from the rear of the cabinet to the side of the cabinet. There is a diffuser on the back of the exhaust duct that guides hot exhaust air to the mesh panel on the rear door. Two Cable Management Finger Kits are included instead of one, and the cabinet includes a Front-To-Rear Cable Manager, which creates a front-to-rear cable pathway along the side of the cabinet, that is not available for the standard cabinet.



Q. Is there a baying kit for the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch?

A. Yes, there is a baying kit for the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch that is used to connect two N-Series TeraFrame Network Cabinets for the Cisco Nexus 7018 Switch that are the same height and depth together side-by-side. One baying kit is included with each cabinet. Baying Kits can also be ordered as service parts. Note that the baying kit cannot be used to connect the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch to other cabinets including other styles of the N-Series TeraFrame Network Cabinet or the F-Series TeraFrame Cabinet Systems. However, the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch does match the overall height and depth of other N-Series TeraFrame Network Cabinets and F-Series TeraFrame Cabinet Systems and can be placed next to these cabinets in a multi-cabinet bay. All cabinets should be securely fastened to the floor.

Q. Can CPI Cable Runway be attached to the top of the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch?

A. Yes, use the Cable Runway Elevation Kit for Cabinets (CPI P/N 10506-X12 or 10506-X16) to attach cable runway to the top of the cabinet.

Q. Are there other door styles available for the N-Series Teraframe Network Cabinet for the Cisco Nexus 7018 Switch?

A. No, other door styles are not available for the cabinet. The cabinet has perforated front and rear doors to allow front-to-rear airflow in support of hot aisle/cold aisle data center environments.

Q. Can the top panel be removed from the cabinet?

A. Yes, the top panel is a four-piece panel – a single solid central panel that goes over the cabinet frame and three perimeter panels (sides and front). All of the panels attach directly to the cabinet frame and can be removed from the cabinet.

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Q. How many cables can enter the top of the cabinet?

A. There are three types of cable access ports in the top panel. The central panel has four round 2.7 inch (69 mm) diameter grommet-protected ports located close to the corners of the frame. The front panel has four 3.1 inch by 5.3 inch (79 mm by 135 mm) cable access ports – two per corner. The sides have 7.5 inch wide by 38.7 inch deep (193 mm by 983 mm), 7.5 inch wide by 39.7 inch deep (193 mm by 1008 mm) or 7.5 inch by 40.7 inch deep (193 mm by 1034 mm) brush-sealed openings depending on the depth of the cabinet. The cable fill area of each top panel opening and the estimated cable fills are listed in the table below.

Top Panel Opening	Cable Fill Area		Cable Fill (50%)		
	Area (in²)	Area	Cat 5e	Cat 6	Cat 6A
Grommet, All Cabinets	5.9	3810	47	30	21
Knockout, All Cabinets	16.4	10 580	132	83	58
Brush-Sealed, 49.1"D (1247 mm) Cabinet	290.2	187 230	2340	1480	1036
Brush-Sealed, 50.1"D (1272 mm) Cabinet	297.7	192 060	2400	1518	1063
Brush-Sealed, 51.1"D (1297 mm) Cabinet	305.2	196 900	2461	1557	1090

Note: Based on .20" OD Cat 5e, .25" OD Cat 6, .30" OD Cat 6A 4-pair UTP cables.

Q. What is the vertical cable management capacity of the cabinet?

A. Cables can be managed in the front corners or along the sides of the cabinet, but cables must not block airflow to equipment. The cable fill areas and estimated cable fills are listed in the table below.

Cable Space	Cable Fill Area		Cable Fill (50%)		
	Area (in²)	Area	Cat 5e	Cat 6	Cat 6A
Corner, Front Left	70	45 200	564	357	250
Corner, Front Right	50	32 300	403	255	178
Side 49.1"D (1247 mm)	290.2	187 230	2340	1480	1036
Side 50.1"D (1272 mm)	297.7	192 060	2400	1518	1063
Side, 51.1"D (1297 mm)	305.2	196 900	2461	1557	1090

Note: Based on .20" OD Cat 5e, .25" OD Cat 6, .30" OD Cat 6A 4-pair UTP cable.

Q. Can cables enter the bottom of the cabinet?

A. Yes, the bottom of the cabinet is open.

Q. What vertical cable management accessories are available for the cabinet?

A. Each cabinet includes two Cable Management Fingers Kits (P/N 34680-0XX). The Cable Management Fingers Kits are plastic T-shaped cable guides with openings that align with each rack-mount unit in the cabinet. The Cable Management Fingers Kits snap into the front of the cabinet frame and organize equipment patch cords and jumper cables by rack-mount unit. Additional vertical cable management accessories include the Universal Accessory Rail Kit (P/N 15482-C0X) and the Vertical Furcation Bracket (P/N 34707-C0X). The Universal Accessory Rail Kit provides additional cable management for patch cords in the front corners of the cabinet. It attaches to the cabinet's frame and provides attachment points for the Swivel Cable Spool (P/N 34716-C0X) and additional cable tie points. The Vertical Furcation Bracket attaches behind the rear equipment mounting rail on the 51.1 inch (1297 mm) deep cabinet and provides cable tie points and attachment points for Corning Cable Systems Plug & Play Universal Systems trunk cables.

Q. What horizontal cable management accessories are available for the cabinet?

A. Each cabinet includes a Front-To-Rear Cable Manager Kit (P/N 15529-C0X). The Front-To-Rear Cable Manager Kit attaches to the side of the cabinet frame and creates a front-to-rear pathway for cables along the side of the cabinet. As an alternative, the Horizontal Furcation Bracket Kit (P/N 15483-C0X), which also attaches to the side of the cabinet frame, provides cable tie points and attachment points for Corning Cable Systems Plug & Play Universal Systems trunk cables. Use any combination of up to three Front-To-Rear Cable Manager Kits and Horizontal Furcation Bracket Kits per side to organize cables along the sides of the cabinet. You can also place patch panels and fiber enclosures at the top of the cabinet. Use rack-mount Universal Horizontal Cable Managers (P/N 30330-719) to organize patch cords above and below patch panels and Jumper Trays (P/N 12183-719) to move cable bundles from side-to-side.

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Q. Can the cabinet support rack-mount shelves?
A. Yes, single-sided 19"EIA rack-mount shelves and 19"EIA four-post (cabinet) shelves can be mounted in the cabinet when there is sufficient rack-mount space and depth for the shelf and the cabinet's mounting rails are positioned to support the shelf. Note that the mounting rails are positioned 29.8 inches (756 mm) apart.

Q. Can F-Series TeraFrame Cabinet System accessories be used in the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch?
A. No, F-Series TeraFrame Cabinet System accessories cannot be used in the N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch. Although this N-Series cabinet and the F-Series cabinets share the same equipment mounting rail system, the placement of mounting rails within the cabinet and the side-mounted visor that is used with the internal Network Switch Exhaust Duct in the N-Series would interfere with attachment of F-Series vertical thermal, power or cable management accessories. Also, be sure to choose horizontal 19"EIA rack-mount PDUs if PDUs are used.

Q. Is equipment mounting hardware (rack-mount hardware) included with the cabinet?
A. Yes, cabinets equipped with square-punched rails include 25 each M6 cage nuts and screws, and cabinets equipped with tapped rails include 50 each #12-24 screws. Additional equipment mounting hardware can be ordered separately.

Q. Are leveling feet included with the cabinet?
A. Yes, the cabinet includes leveling feet and floor anchor brackets that can be used to attach the leveling feet to the floor with floor-mount hardware.

Q. Are casters included with the cabinet?
A. No, but a Caster Kit (P/N 15537-001) is available as an accessory.

Q. I have questions about the assembly of components and/or installation of the cabinet?
A. The N-Series TeraFrame Network Cabinet for the Cisco Nexus 7018 Switch User Manual, which includes a complete installation guide, is available for download on the CPI Website at www.chatsworth.com/n-series.

Q. I did not find the answer to my question. Who do I contact for assistance?
A. Please contact CPI Technical Support (800-834-4969 or techsupport@chatsworth.com) for assistance.

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