

Prepare to Install Cisco NCS 1014

This chapter explains how to prepare for the Cisco NCS 1014 installation.

- Shipping and Receiving, on page 1
- Shipping and Receiving of NCS 1014-2 Chassis, on page 8
- Unpack and Verify the Cisco NCS 1014 Chassis, on page 10

Shipping and Receiving

You can order the Cisco NCS 1014 as an assembled chassis (NCS1K14-SYS) along with the components. You can order the spare modules as well. See PIDs for all PIDs of the NCS 1014 components.

The shipped package contains the following:

- Cisco NCS 1014 chassis. See Assembled Chassis.
- Accessory kit (53-100873-02) that has all the installation hardware.

Note From R24.4.1, you can order the NCS1K14-S-KIT accessory kit for 19-inch racks that are up to 40-inch in depth.

Note The **NCS1K14-ACC-KIT=** is the orderable spare kit for the standard accessory components originally shipped with the NCS 1014 chassis. Order this spare kit only if the components in the original kit are misplaced.

Table 1: Accessory Kit Contents

Accessory Kit	Contents
NCS1K14-ACC-KIT (53-100873-02)	This kit has the following items for chassis installation: • Double hole 90-degree ground lug for chassis (1x). **Note** We recommend that you use the 90-degree ground lug for NCS 1014. • Double hole straight ground lug for chassis (1x) • M4 Phillips flat-head mounting screws for mounting brackets (12x) • M5 pan-head screws for ground lug (2x) • External tooth lock washers for ground lug (2x) • 12–24 pan head mounting screws for slide rails (24x) • Left mounting bracket for chassis (1x) • Right mounting bracket for chassis (1x) • 23" rack to 19" rack adapters (4x) • ETSI rack to 19" rack adapters (4x) • Two-post left slide rail (1x) • Two-post right slide rail (1x) • Four-post left slide rail (1x) • Four-post right slide rail (1x)
NCS1K14-S-KIT	This kit has the following items for chassis installation: • Four-post (30-40") left slider rail (1x) • Four-post (30-40") right slider rail (1x) • Fiber management bracket for power cable (1x) • Double hole straight ground lug for slider rail (1x) • External tooth lock washers for ground lug (2x) • Hex lock nuts for ground lug (2x) • M3 Phillips flat-head mounting screws for fiber manager bracket (4x) • 12–24 pan head mounting screws for slide rails (24x)

• Spare Serial Number label.

- Two PSUs—AC or DC. Installation of PSUs is discussed in the Install Cisco NCS 1014 Modules chapter.
- AC and DC power cables that you have ordered.

  AC chassis—while ordering for an AC chassis, select the power cable type (straight, 90-degree, or jumper) and P1 connector (NEMA or CEE). Based on your choice, you will get a pair of 90 degree, straight, or jumper cables with NEMA or CEE connector for each PSU.

Table 2: Power Cables for the AC Chassis

Type of Cable	Voltage	P1 Connector	P2 Connector	PID	Specs	Cable Length (m)
Straight cable	240 V	NEMA L6-20P	IEC 60320 – C21	NCS1K4-AC-PSU-CBL=	16 A, 250 V	4.250
	240 V	CEE 7/7 (Europe)	IEC 60320 – C21	NCS1K4-AC-CBL-EU=	16 A, 250 V	4.250
90-degree cable	240 V	CEE 7/7 (Europe)	IEC 60320 – C21	NCS1K4-AC-CBL-EU=	16 A, 250 V	4.250
	240 V	NEMA L6-20P	IEC 60320 – C21	NCS1K4-AC-PSU-CBL	16 A, 250 V	4.250
Straight jumper	240 V	IEC 60320 – C14	IEC 60320 – C21	NCS1K4-CBL-4.25M=	15 A, 250 V	4.250 (North America use only)
	240 V	IEC 60320 – C14	IEC 60320 – C21	NCS1K4-C21-C14-2M=	15 A, 250 V	2 (North America use only)
Straight jumper	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-5F-NA=	16 A, 250 V	1.6 (North America)
	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-5F-EU=	16 A, 250 V	1.6 EU)
	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-5F-IN=	16 A, 250 V	1.6 (India)
Straight jumper	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-4M-NA=	16 A, 250 V	4.25 (North America)
	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-4M-EU=	16 A, 250 V	4.25 (EU)
	240 V	IEC 60320 – C20	IEC 60320 – C21	N1K4-C2021-4M-IN=	16 A, 250 V	4.25 (India)

Figure 1: 90-degree Cable (CEE 7/7)

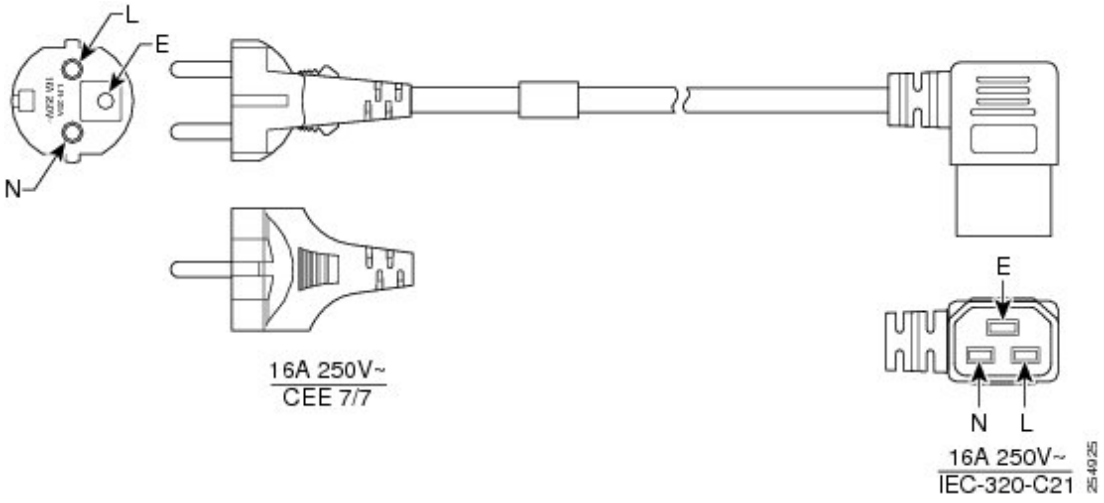


Figure 2: 90-degree Cable (NEMA L6-20P)

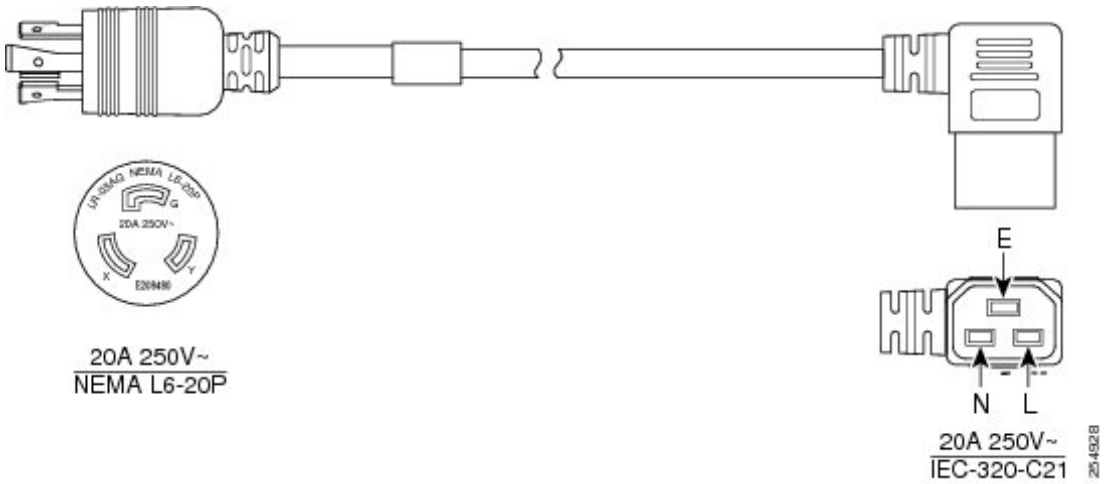


Figure 3: Straight Cable (NEMA L6-20P)

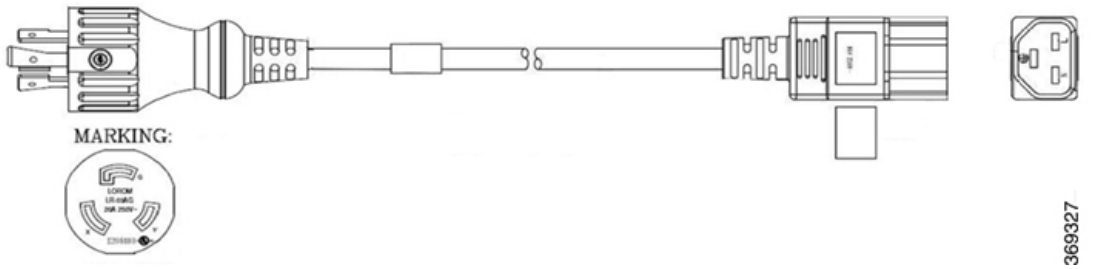
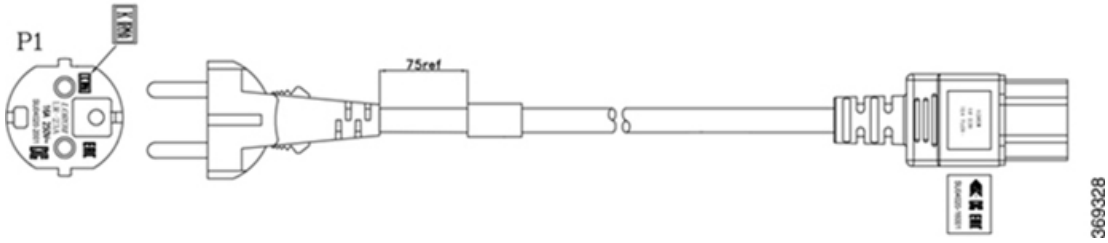


Figure 4: Straight Cable (CEE 7/7)



DC chassis—when you order for a DC chassis, you get four power lugs for each PSU (a pair of 90-degree and a pair of 180-degree lugs). The power lugs are included in the DC PSU package for spare-order. For Assemble-to-order, the power lugs are included in the Accessory kit.

Important We recommend that you use the 180-degree power lugs for ETSI racks to maintain a footprint of 600 mm. Ensure that there is a minimum gap of 50 mm for routing the cables.

Figure 5: DC Power Cable Lug (180-degree)

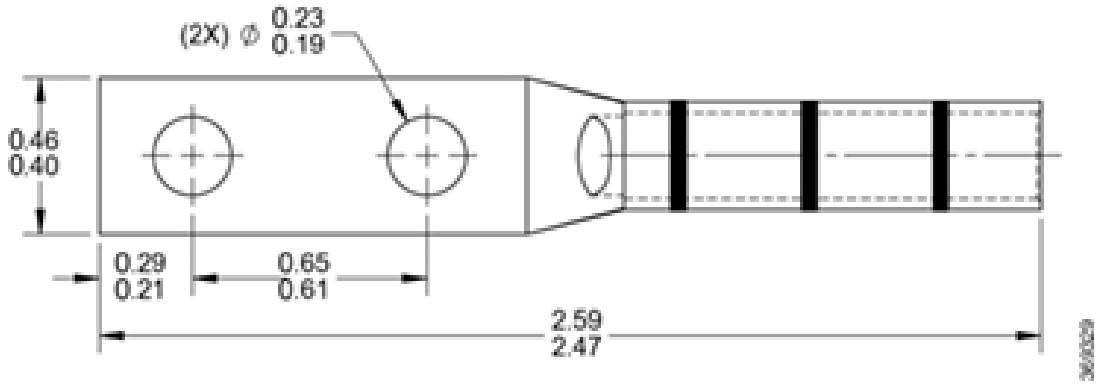
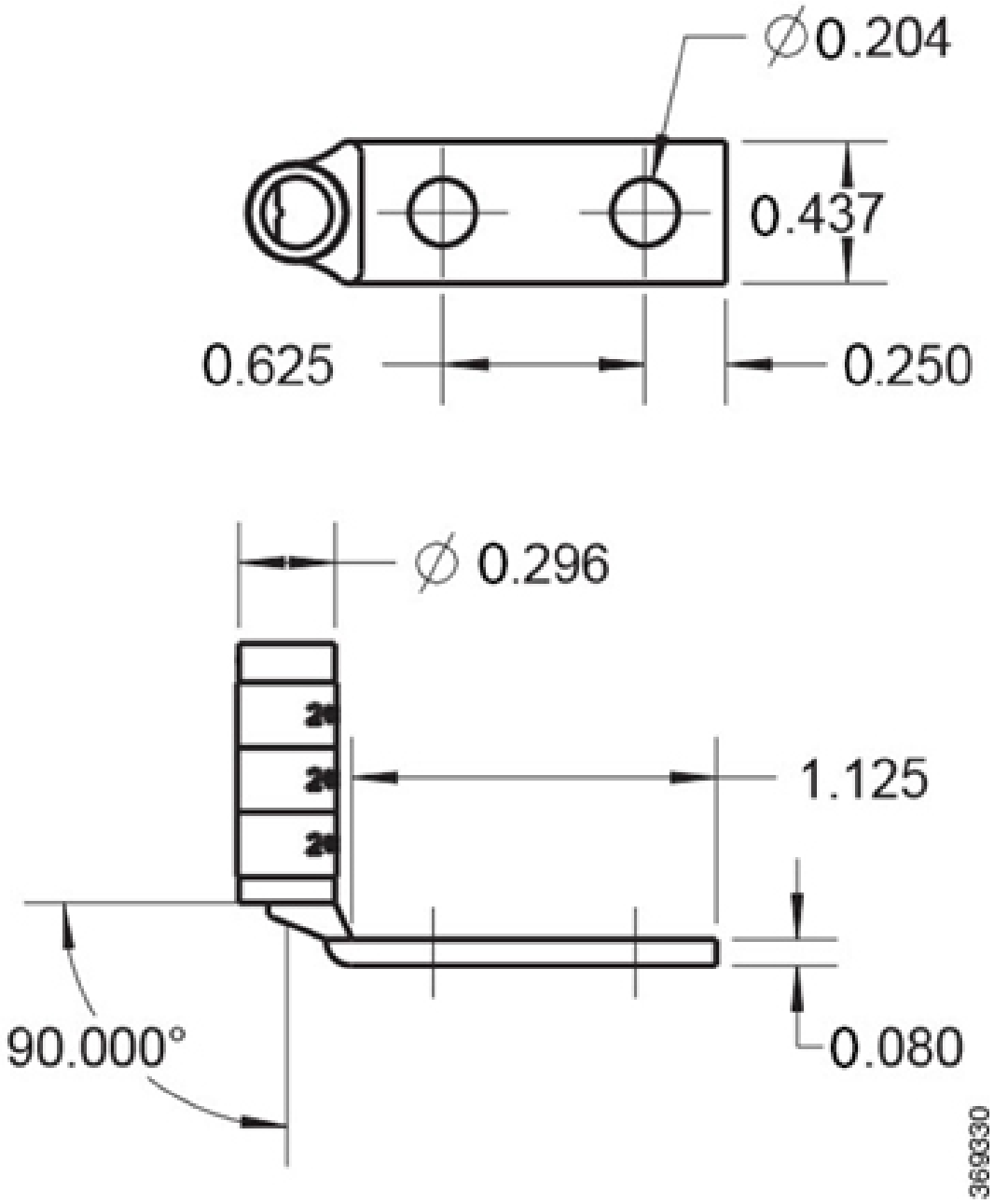


Figure 6: DC Power Cable Lug (90-degree)



Assembled Chassis

The chassis is shipped in one of the following ways:

- **Chassis with Filler Cards and Line Cards**

  You will receive the chassis with preinstalled line cards, based on the number of line cards that you have ordered, and filler cards in the rest of the card slots. If you have preordered four line cards, then the

chassis does not contain any filler cards. Four fiber management brackets come in the package, for each of the line card or filler cards preinstalled in the chassis. The controller, SSD, and three fan modules are also preinstalled. The chassis package includes only the accessory kit and PSUs.

Figure 7: Chassis Shipped with Line Cards



- **Chassis with Only Filler Cards**

  You will receive the chassis with four filler cards in the card slots. The chassis package includes four fiber management brackets, one bracket for each of the filler cards. If you order one or more line cards as spare items, you will receive each of them separately, with an extra fiber management bracket in each package. The controller, SSD, and three fan modules are preinstalled. The chassis package includes only the accessory kit and PSUs. You must order the line cards separately.

Shipping and Receiving for Bundle options

From R25.4.1, you can order the Cisco NCS 1014 EDFA2 card (NCS1K14-EDFA2) along with its mux/demux patch panels and pluggable modules as a bundle. For more information on NCS 1014 EDFA2 PIDs, see PIDs.

Table 3: Accessory Kit Contents

Accessory Kit	Contents
NCS1K14-MOLS-SK	This EDFA2 bundle has the following items for installation: • NCS1K14-EDFA2 (1x) • ONS-QSFP-OTDR (1x) • ONS-SC-PTP-1510 (1x) • NCS1K-MD-32O-CE (1x) • NCS1K-MD-32E-CE (1x) • DP04QSDD-E26-A1 (1x)

Shipping and Receiving of NCS 1014-2 Chassis

You can order the Cisco NCS 1014-2 as an assembled chassis (NCS1K14-2SYS) that has one or two OXP2-K9 cards installed, or as as an ATO chassis filled with filler cards and a removable divider, along with the OXP card. You can order the spare modules as well. See PIDs for all PIDs of the NCS 1014-2 components.

The shipped package contains the following:

- Assembled Chassis
  - Cisco NCS 1014-2 chassis.
  - Accessory kit (53-100873-02) that has all the installation hardware.

Note You can order the NCS1K14-S-KIT accessory kit for 19-inch racks that are up to 40-inch in depth.

Note The **NCS1K14-ACC-KIT=** is the orderable spare kit for the standard accessory components originally shipped with the NCS 1014 chassis. Order this spare kit only if the components in the original kit are misplaced.

- ATO chassis with OXP2-K9 line card
  - Cisco NCS 1014-2 chassis with filler and divider
  - OXP2-K9 line card
  - Accessory kit (53-100873-02) that has all the installation hardware.

Note You can order the NCS1K14-S-KIT accessory kit for 19-inch racks that are up to 40-inch in depth.

The **NCS1K14-ACC-KIT=** is the orderable spare kit for the standard accessory components originally shipped with the NCS 1014 chassis. Order this spare kit only if the components in the original kit are misplaced.

Table 4: Accessory Kit Contents

Accessory Kit	Contents

NCS1K14-ACC-KIT
(53-100873-02)
	This kit has the following items for chassis installation:
	• Double hole 90-degree ground lug for chassis (1x).
	Note We recommend that you use the 90-degree ground lug for NCS 1014.
	• Double hole straight ground lug for chassis (1x)
	• M4 Phillips flat-head mounting screws for mounting brackets (12x)
	• M5 pan-head screws for ground lug (2x)
	• External tooth lock washers for ground lug (2x)
	• 12–24 pan head mounting screws for slide rails (24x)
	• Left mounting bracket for chassis (1x)
	• Right mounting bracket for chassis (1x)
	• 23" rack to 19" rack adapters (4x)
	• ETSI rack to 19" rack adapters (4x)
	• Divider (For the ATO chassis)
	• Slide rails
	  • Two-post left slide rail (1x)
	  • Two-post right slide rail (1x)
	  • Four-post left slide rail (1x)
	  • Four-post right slide rail (1x)

NCS1K14-S-KIT	This kit has the following items for chassis installation: • Four-post (30-40") left slider rail (1x) • Four-post (30-40") right slider rail (1x) • Fiber management bracket for power cable (1x) • Double hole straight ground lug for slider rail (1x) • External tooth lock washers for ground lug (2x) • Hex lock nuts for ground lug (2x) • M3 Phillips flat-head mounting screws for fiber manager bracket (4x) • 12–24 pan head mounting screws for slide rails (24x)

Table 5: OXP2-K9 line card

Line card package	Contents
OXP2-K9 line card	• Line card • Hooks (2x)

Table 6: Power Cables for the AC Chassis with NCS1K14-AC-PSU-3

Type of Cable	Voltage	P1 Connector	P2 Connector	PID	Specs	Cable Length (m)
Straight jumper	240 V	NEMA L6-20P	IEC 60320 – C21	NCS1K4-C20SA-CBL	20 A, 250 V	4.250 (North America and Europe use only)
	240 V	SAF-D-GRID	IEC 60320 – C20	N1K4-C20SA-R-IN(=)	20 A, 250 V	1.6 (India use only)
	240 V	SAF-D-GRID	IEC 60320 – C20	N1K4-C20SA-B-IN(=)	20 A, 250 V	1.6 (India use only)
	240 V	SAF-D-GRID	IEC 60320 – C20	CAB-AC-20A-SG-C20	20 A, 250 V	4.250
Straight cable	240 V	NEMA 6-20P	SAF-D-GRID	CAB-AC-20A-SG-US2	20 A, 250 V	4.250
	240 V	NEMA L6-20P	SAF-D-GRID	CAB-AC-20A-SG-US3	20A, 250 V	4.250
	240 V	SABS 164-1	SAF-D-GRID	CAB-AC-16A-SG-IND	20A, 250 V	4.250
	240 V	CEE 7-7	SAF-D-GRID	CAB-AC-16A-SG-EU	20A, 250 V	4.250

Unpack and Verify the Cisco NCS 1014 Chassis

Use this procedure to unpack the shipment and verify that you have all the chassis modules that are required for installation.

Procedure

Step 1 When you receive the Cisco NCS 1014 equipment at the installation site, open the top of the box.

Step 2 Remove accessories and foam inserts from the box. The box contains Cisco NCS 1014 chassis and other items that are needed for installation.

Step 3 To remove the chassis from the packaging, grasp the side of the chassis and lift it out of the box.

Use these lifting guidelines to avoid injury to yourself or damage to the equipment:

- Do not lift equipment alone. Have another person help you to lift the equipment.

  A fully loaded chassis can weigh as much as 28.7 kg (63.3 lbs).

- Ensure that your footing is solid; balance the weight of the object between your feet.
- Lift the equipment slowly; never move suddenly or twist your body as you lift.

- Keep your back straight and lift with your legs, not your back. When bending down to lift equipment, bend at the knees (not at the waist), to reduce the strain on your lower back muscles.

Step 4 Verify the following:

- The Cisco NCS 1014 chassis is undamaged. Check the chassis for scratches, bends, discolorations, or deformations.
- The other modules that are shipped with the chassis or separately are undamaged.

Step 5 If you notice any damage to the chassis or the modules, call your Cisco sales engineer for a replacement.