

Power Tower Cord & Connector Options

The purpose of this Technical Note is to define:

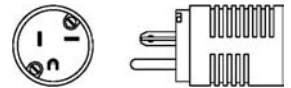
- types of primary AC circuit connections on Power Tower products
- available input cord sets and plug types
- types of outlets on Power Tower products
- available output cord sets
- available 3rd party cable vendors for custom or country-specific applications

Primary AC Connection

Power Tower products connect to dedicated AC circuits by one of two methods:

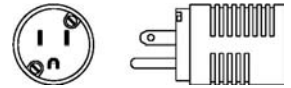
1. Fixed (non-detachable) cord set; applicable to 30A 230V products and all 120V products. Standard cord sets may be terminated with a variety of plug types, which must be selected at time of order.

- *Option 1: 120V AC, 20A NEMA 5-20P Straight-Blade Cord Set*
10 feet, 3x14AWG cordage
20A maximum domestic rating for applications up to 125V AC.
Commonly used for North American 20A/120V circuit applications.

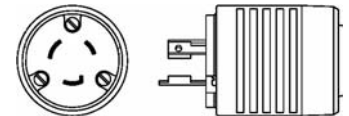


- *Option 2: Not applicable; see #2 on page 2.*

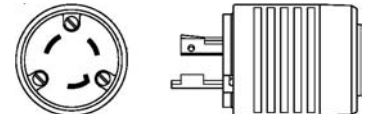
- *Option 3: 120V AC, 15A NEMA 5-15P Straight-Blade Cord Set*
10 feet, 3x14AWG cordage
15A maximum domestic rating for applications up to 125V AC.
Commonly used for North American 15A/120V circuit applications.



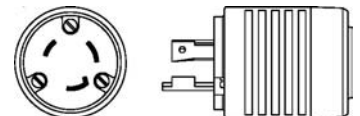
- *Option 4: 120V AC, 20A NEMA L5-20P Locking Cord Set*
10 feet, 3x14AWG cordage
20A maximum domestic rating for applications up to 125V AC.
Commonly used for North American 20A/120V circuit applications.



- *Option 5: 120V AC, 30A NEMA L5-30P Locking Cord Set*
10 feet, 3x10AWG cordage
20A maximum domestic rating for applications up to 125V AC.
Commonly used for North American 30A/120V circuit applications.



- *Option 6: 230V AC, 30A NEMA L6-30P Locking Cord Set*
10 feet, 3x10AWG cordage
30A maximum domestic rating for applications up to 230V AC.
Commonly used for North American 20A/230V circuit applications.



2. **Universal 16/20A inlet with detachable cord set (Option 2);** 230V products with capacities $\leq 20A$. The universal inlet is an IEC 60320 C20 as defined by the International Electrotechnical Commission's 60320 standard sheet C20 and is compatible with a variety of cord sets available for purchase with the Power Tower.



The cord set will have an IEC 60320 C19 connector on one side and the application specific plug on the other. The IEC 60320 C19 connector has a maximum domestic rating of 20A and a maximum international rating of 16A for applications up to 250V.

- **PTCORD-1: 230V AC, IEC 60320 C19 to 20A NEMA L6-20P Locking**
10 feet, 3x14AWG cordage
20A maximum domestic rating for applications up to 250V AC.
Commonly used for North American 20A/120V circuit applications.
- **PTCORD-2: 230V AC, IEC 60320 C19 to 16A CEE 7/7 'Shuko'**
2.5 meters, 3x1.5²mm cordage
16A maximum international rating to for applications up to 250V AC.
Commonly used in Germany, Austria, the Netherlands, Sweden, Norway, Finland, France and Belgium.
- **PTCORD-3: 230V AC, IEC 60320 C19 to 16A IEC 60306 (BS 4343) 'Commando'**
2.5 meters, 3x1.5²mm cordage, 16A maximum international rating for applications up to 250V AC.
Used selectively in international communities and commonly in the United Kingdom for installations requiring 16A maximum capacity.



NOTE:

1. This cord set is generally a non-stock item but usually may be supplied in a timely manner depending on quantity.
2. IEC 60309 also defines a 230V AC, 32A version of the 'Commando'. This is available through Server Technology only as a fixed cord set; see #1 above. Contact your Account Representative for pricing and availability.

- **PTCORD-4: 230V AC, 13A BS 1363 to IEC 60320 C19 Cord Set**
2.5 meters, 3x1.5²mm cordage
13A maximum international rating for applications up to 250V AC.
Commonly used in the United Kingdom and Ireland.
- **PT-ADP-C19: IEC 60320 C19 Headshell Adapter**
Cable-mount connector available for modification of existing customer-supplied country-specific cord set for use with the Power Tower. Installation instructions included.
Accepted for use in most countries.
Approvals: UL (United States), CSA (Canada), VDE (Germany) and SEV (Switzerland).



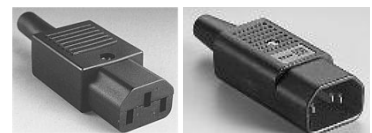
Outlet Connections and Cord Sets

1. **NEMA 5-15R:** applies to all 120V AC Power Towers
Each outlet on the Power Tower is rated to a maximum of **10A** per TUV safety certifications to UL/CSA/EN 60950.
2. **IEC 60320 C13:** applies to all 230V AC Power Towers
Each outlet on the Power Tower is rated to a maximum of **6A** per TUV safety certifications to UL/CSA/EN 60950.



Nearly all modern electronic devices that operate at 10A or less are equipped with the general purpose IEC 60320 C14 inlet. For these applications, a common male-to-female extension cord set is required.

- **CAB-1302: IEC 60320 C14 to IEC 60320 C13 Cord Set**
7 feet, 3x12AWG cordage
10A maximum rating for applications up to 250V AC.
Commonly used globally.



NOTE: Server Technology recommends the purchase of one cord set for every outlet on the Power Tower. This Server Technology cord set is specifically suited for use with the Power Tower cable retention clip. Similar cord sets from other vendors may not fit as well or at all.

- **Outlet Cord Set Alternatives**

For devices equipped with inlets other than the IEC 60320 C14 inlet, it will be necessary to obtain or manufacture a conversion cord set; this cord set will have an IEC 60320 C14 inlet on one end and the application specific receptacle/outlet on the other.

Example:

A device equipped with a fixed (non-detachable) input power cord set and CEE 7/7 'Shuko' plug will require a conversion cord set with an IEC 60320 C14 inlet on one end and a CEE 7/7 receptacle/outlet socket on the other.

Server Technology does NOT maintain stock of conversion or adapter cordsets.

Conversion cord sets are generally available within the country of use or from a variety of cord set manufacturers. However in some cases, it may be necessary hand-build or have the cord set custom assembled. In these cases, CAB-1302 may be used by replacing the IEC 60320 C13 outlet with the application specific cable-mount receptacle/outlet.

Cable-mount receptacle/outlets are commonly available through variety of manufacturers for most countries.



Figure 1
Australia AS 3112



Figure 2
United Kingdom BS 1363



Figure 3
Switzerland 1011

3rd Party Cable Vendors

Panel Components Corporation:

USA/Canada: 800.662.2290

International: 515.673.5000

Web: www.panelcomponents.com

Quail Electronics:

USA/International: 800.669.8090

Web: www.quail.com

Globtek:

USA: 201.784.1000

Email: sales@globtek.com

Web: www.globtek.com