

Overview

Healthcare laboratories use electronic devices such as microscopes, analyzers, centrifuges, refrigerators, freezers, ovens, robotics and computers too routinely assist with examining samples. In some instances the power cable for these devices may require replacement because of damage or to reach distant power outlets. Unlike home and office applications, electronic devices used in healthcare facilities must meet strict grounding requirements to prevent injury to patients and staff members.



Electrical arcs caused by improperly grounded equipment can be hazardous due to the presence of volatile chemicals and gases such as solvents and oxygen. In addition improper grounding can occur if the ground pin on a power plug has not made sufficient contact with the ground pin on the wall outlet. Strain placed on the power cord from tight bend radii can result in electrical shorts if the power conductor is exposed to an open ground source.

To prevent grounding issues, a special hospital grade power cable must be used with electronic devices in healthcare facilities. Hospital grade power cables are designed to provide optimal grounding qualities and withstand bend tight radii without incurring damage.

How do Cables To Go solutions fit into this type of application?

We offer a complete line of hospital grade power cables to meet the needs for today's laboratory connectivity. Our NEMA 5-15P to C13 power cables are ideal for laboratory computers, monitors and printers. Our NEMA 5-15P to ROJ power cables for direct wired devices are perfect for use with centrifuges, analyzers, refrigerators and freezers which may require a replacement power cable or longer length. Connectors with clear plastic over molding allow visual inspection of the plug wiring to verify safe operation.

Auditorium Solution Example

A hospital is adding additional equipment to its existing laboratory. Equipment includes a refrigerator, centrifuge and two computer stations. Some of the new equipment's included power cables do not reach due to the distant placement of the outlets. Since the installation is permanent, the use of extension cable is not desired. The refrigerator needs a 15ft cable while the centrifuge requires a 10ft. The new computers will be placed in a cabinet which has limited depth and presents a challenge with the included 180 degree angle power cables. The power outlets are only two feet away from the computer towers.



Solution Overview

To overcome these challenges we recommend the use of our hospital grade power cables. Since both the refrigerator and centrifuge have direct wired cable, our 15ft NEMA 5-15P to ROJ cable (#48032) can be installed on the refrigerator while a ten foot length (#48028) can be installed on the centrifuge. Both computer towers can use our two foot NEMA 5-15P to right angled C13 power cable (#48042) to overcome the issue of limited depth in the cabinet.

Solution Components

Description: 15ft NEMA 5-15P to ROJ

Application: Direct wiring replacement for the refrigerator unit

Part number: 48032

Quantity: 1

Description: 12ft NEMA 5-15P to ROJ

Application: Direct wiring replacement for the centrifuge

Part number: 48028

Quantity: 1

Description: 2ft NEMA 5-15P to right angled C13

Application: Power cable for computers in cabinet

Part number: 48042

Quantity: 2



Note: The solution described above is one of many connectivity solutions that Cables To Go can provide. For additional information on solutions for your particular application, please contact us.



Application Note - Education Laboratory Connectivity Solutions

