

## Overview

In a medical facility, the server room is the heart of all network connectivity for sharing resources such as printers, scanners, data storage and the Internet. Currently, many healthcare facilities are adding additional computers with network access in rooms, which increases the amount of cabling. As cabling increases, effective organization of all connections becomes vital to ensure troubleshooting and maintenance needs. Using cabling of a specific jacket color can be beneficial in isolating and identifying specific connections, such as network printers, phones and computers.

In healthcare applications it is important that critical data is received as quickly as possible. To maintain the speed of communication, a server backbone of fiber optic cabling is a requirement.



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

The Q-Series fiber optic cabling distribution system allows for quicker installs and upgrades of fiber optic cabling infrastructure. The Q-Series offers a scalable modular solution that is able to grow with the needs of a system. This scalable solution allows for easy installation and expansion of a fiber optic backbone within a medical facility. Our selection of fiber optic and Cat6 cabling offers a wide variety of connector types, cable lengths and different colors. Using different colors of cable allows designation and quick identification of specific connection types, i.e. Internet, phone, etc. We also offer a full line of hospital grade power cables designed to meet the critical needs of medical equipment.

### Server Room Solution Example

A hospital plans to connect two server rooms that are approximately 65ft apart and on different floors. A fiber optic backbone and a fiber distribution system will be used to make the connection. The distributed fiber system must tie into the copper network used on each floor.



## Solution Overview

We recommend our Q-Series™ fiber distribution system and media converters along with our Cat6 network cabling. An MTP fiber cable (#31409) will be run between the two server rooms. At each end of the MTP® cable a Q-Series distribution module (#39130) will be used within an enclosure (#39106) to break out the fiber connections from the MTP cable. Media converters (#26630) will be used to make the signal conversion from the fiber network to the copper network and vice versa. Bulk Cat6 network cable (#43104) will be used to create custom length patch cables, which will make the copper connections within each room.

## Solution Components

**Description:** 20m MTP 50/125 Multimode Fiber Patch Cable - Orange

**Application:** Fiber backbone connection between the two server rooms

**Part number:** 31409

**Quantity:** 1



**Description:** Q-Series 12-Strand MTP-SC Multimode 50/125 Module

**Application:** Used at each end of the MTP cable to breakout the fiber connections

**Part number:** 39130

**Quantity:** 2



**Description:** Q-Series 2-Panel Wall Mount Box

**Application:** Protects the fiber cable as well as the module in each server room

**Part number:** 39106

**Quantity:** 2



**Description:** 10/100Base-TX to MM 100Base-FX SC Media Converter

**Application:** Converts fiber optic light signals to electric signal for copper and vice versa

**Part number:** 26630

**Quantity:** Varies depending on the number of connections in the application



**Description:** 1000ft Cat6 UTP 250 MHz Stranded PVC Cable – Blue

**Application:** Used to make the copper connections within the server room

**Part number:** 43104

**Quantity:** Varies depending on the length and number of connections required



**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 Server Room Connectivity Solutions

