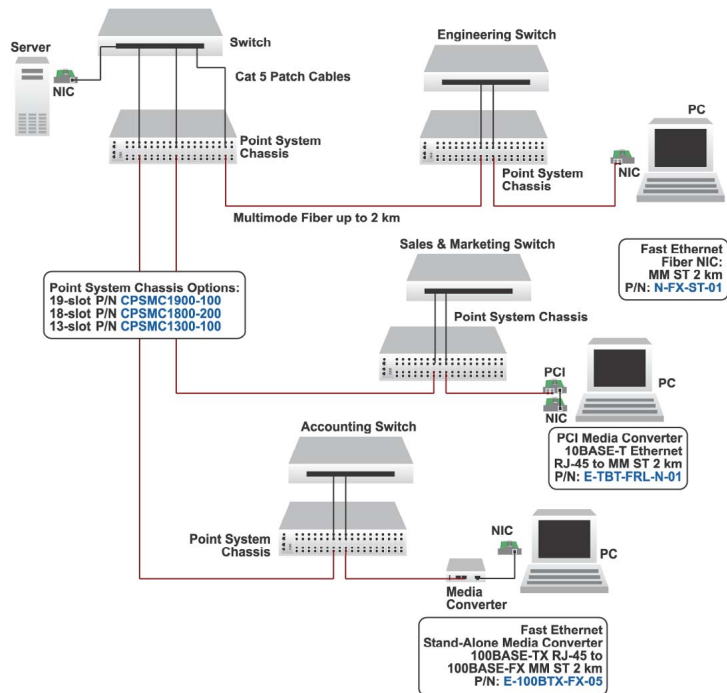


## Fiber to the Desktop Made Possible on the Installment Plan

Most IT professionals will tell you their computer network is a living and breathing system. Never standing still, their networks are constantly changing and growing as their company grows and as new technologies become available. Fiber optic cabling is one technology that is recognized for its benefits over twisted pair copper. Those benefits include the capacity for network traffic to travel long distances and the protection that fiber provides from electrical interference.

When companies want to take advantage of new technologies, they have to find ways of integrating the new with the old. Rarely do they have the budget for a complete network overhaul. When it come to deploying fiber cabling in a network, media converters provide the perfect solution for adding fiber where it is needed, when it is needed. The idea behind media conversion is to make one cable act and look like another. The ability to cost effectively connect different cable types with out replacing expensive hardware is what makes media conversion such an attractive solution. As fiber makes its way into more and more networks, the concept of fiber to the desktop is becoming a reality. Transition Networks® offers three different solutions for sending fiber to the desktop.



One of the greatest benefits to a company using media converters is that it allows them to integrate fiber into their copper network, on an "as needed" basis. As each floor or department of a company is upgraded to fiber, the currently installed copper-based hubs, switches, and NIC's can still be used. When the Engineering department wants to send fiber to the desktop for their high-end design workstations. They could use a media converter to connect their departments copper switch to the fiber running to each workstation. The copper NIC in the workstation would be replaced with a Fiber NIC. This solution provides the most

protection from electrical interference, which sometimes can disrupt data communication if some electronic equipment is used near copper twisted pair cable.

Sales & Marketing might be the next department to install fiber to the desktop. Their configuration is very similar to the Engineering department except they don't have the budget to buy Fiber NIC's. So they will use a PCI converter. This is a traditional media converter except it is designed to mount in a PCI slot and receive its power from the computer. A short twisted pair patch cable is needed to connect the PCI converter to the existing copper based network interface card. Since most computer manufactures are selling PC's with NIC's already installed and some are even integrating the NIC in the motherboard, the PCI converter is an excellent solution for fiber connectivity.

Our third example involves the Accounting department. When they want to send fiber to the desktop, they might not have the time or the money to open each computer and install either a Fiber NIC or a PCI converter, so they chose to use the stand-alone media converter. Again the fiber is run to each workstation where the stand-alone is installed along with a twisted pair patch cable to connect the converter to the copper based NIC already installed in the computer.

In each case, the company was able create a fiber to the desktop environment in a cost-effective manor. By integrating fiber in a copper network, the company was able to add fiber where they needed it, when they needed it, all while protecting the investment in much of the current networking equipment.



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Transition Networks is the leader in media conversion technology; offering a wide array of products including Ethernet, Fast Ethernet (FX and SX), Gigabit Ethernet, 10/100 rate converters, T1/E1, DS3, OC3, OC12, RS485, V.35, Token Ring and more. Our Point System chassis provides users with manageability, reliability, and future proofing. The Point System offers fully SNMP compliant read/write software including web-based management. The chassis also provides for redundant management, redundant power (AC or DC), converters that can be upgraded in the field, and more. Please contact Transition Networks for more information and how we may be able to help you deliver data services to your customers.

**Transition Networks Product Numbers:**

*Point System Chassis:*

19-slot Point System Chassis . . . . . **CPSMC1900-100**  
18-slot Point System Chassis . . . . . **CPSMC1800-200**  
13-slot Point System Chassis . . . . . **CPSMC1300-100**

*Point System Slide-In-Module Media Converters:*

Ethernet UTP to Multimode Fiber . . . . . **CETTF10xx-x0x**  
Fast Ethernet UTP to Multimode Fiber . . . . . **CFETF10xx-x0x**

*Fast Ethernet Network Interface Card*

100BASE-FX MM ST 2km . . . . . **N-FX-ST-01**

*Ethernet PCI Media Converter*

10BASE-T RJ-45 to 10BASE-FL MM ST 2km . . . . . **E-TBT-FRL-N-01**

*Fast Ethernet Stand-Alone Media Converter*

100BASE-TX RJ-45 to 100BASE-FX MM ST 2km . . . . . **E-100BTX-FX-05**