

APPLICATION GUIDE

The goal of this section is to illustrate how Siemon Company products can be used to support some of the most popular and emerging networks on the market.

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The following pages contain a guide for the installation of a number of specific network applications. The goal of this section is to illustrate how Siemon Company products can be used to support some of the most popular and emerging networks on the market. For each application there is usually more than one way to install the network. Since the Siemon Company's structured cabling components have been designed to perform within the context of ANSI/EIA/TIA-568-A and ISO/IEC 11801 standards, some fundamental assumptions have been made for this guide.

First, all of the horizontal cabling in this section is 4-pair, unshielded twisted-pair cable. All modular jacks are wired to the T568A pin configuration.

Second, while many network equipment manufacturers recommend a maximum drop distance between the equipment and the work area device, the horizontal distances in this guide are assumed to be 90 meters or less. This distance is in accordance with the recommendation in the '568-A and 118001 documents for horizontal cabling and allows for the additional length of patch cords at the work area and in the telecommunications closet.

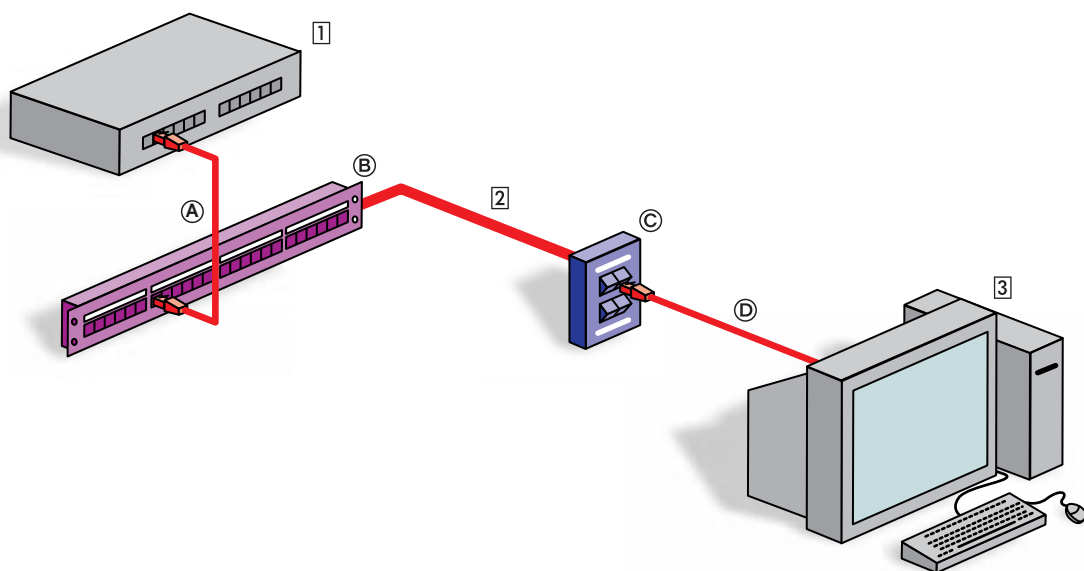
Third, to simplify the list of Siemon products that can be used for each application, the CT® Series of products has been recommended in most cases. Alternate products have been listed where applicable.

The Siemon Company offers technical support to customers needing assistance designing their network. Our technical support staff will work with customers to help design a network that will support their needs, and recommend appropriate Siemon Company products. For assistance call our Technical Support Department or e-mail Tech Support @ Siemon.com.

100BASE-T

The IEEE has developed a set of standards for the operation of a 100 Mbps Ethernet Network. The three additions to the 802.3 document are 100BASE-TX, 100BASE-FX, AND 100BASE-T4. 100BASE-TX is designed to operate over two pairs of category 5 UTP cabling. 100BASE-FX is designed to operate over two optical fibers, and 100BASE-T4 is designed to operate over four pairs of category 3 or 5, UTP or STP cabling.

The network consists of a central hub that is connected in a star-wired configuration to individual workstations containing a network interface card. The IEEE 802.3 100BASE-T standard recommends the use of category 5 UTP cabling for network implementation. Category 5 structured cabling that is compliant with the TIA/EIA 568-A standard will fully support a 100BASE-T network.



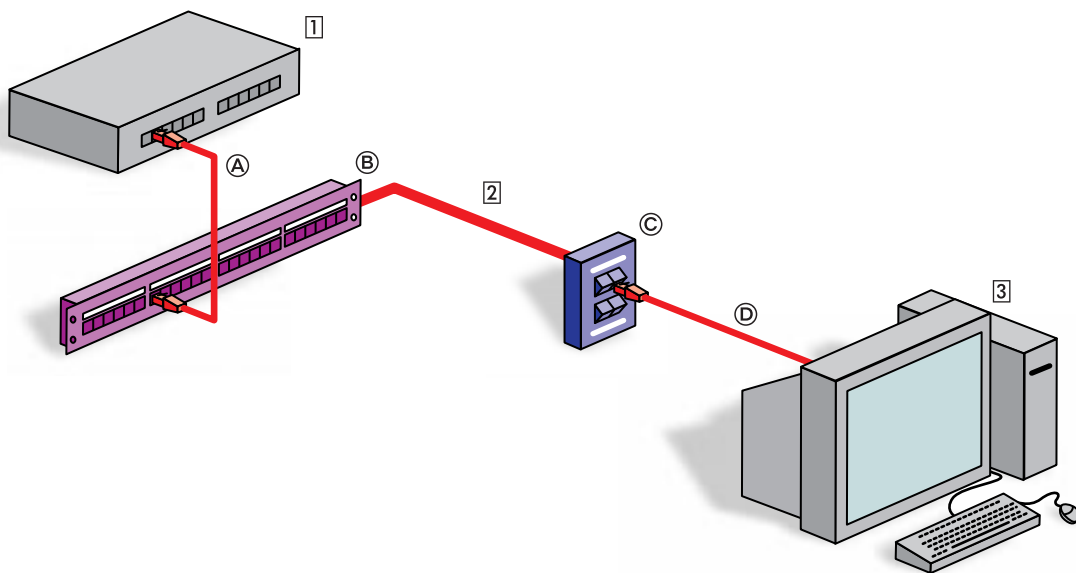
Simon Product	6 sm Solution	5 ^e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 100BASE-T Hub		
2 4-Pair Horizontal Cabling	System 6 sm approved cable	System 5 ^e approved cable
3 Work Area Equipment		

MODULAR 10BASE-T HUB

10BASE-T is an IEEE 802.3 standard for operating 10 Mbps Ethernet local area networks (LANs) on unshielded twisted-pair cabling. Some advantages 10BASE-T has over the original coax-based Ethernet LANs include the possible use of existing building cabling, lower cost, and elimination of network failure due to main bus failures. 10BASE-T networks require a minimum of category 3 cable and connecting hardware for proper operation.

The overall system consists of a central cabling hub that is connected in a star-wired configuration to individual workstations containing a Network Interface Card (NIC) with either an internal or external transceiver. The cabling hub typically supports port sizes in increments of 12. (There are a limited number of manufacturers that work in increments of 8.)

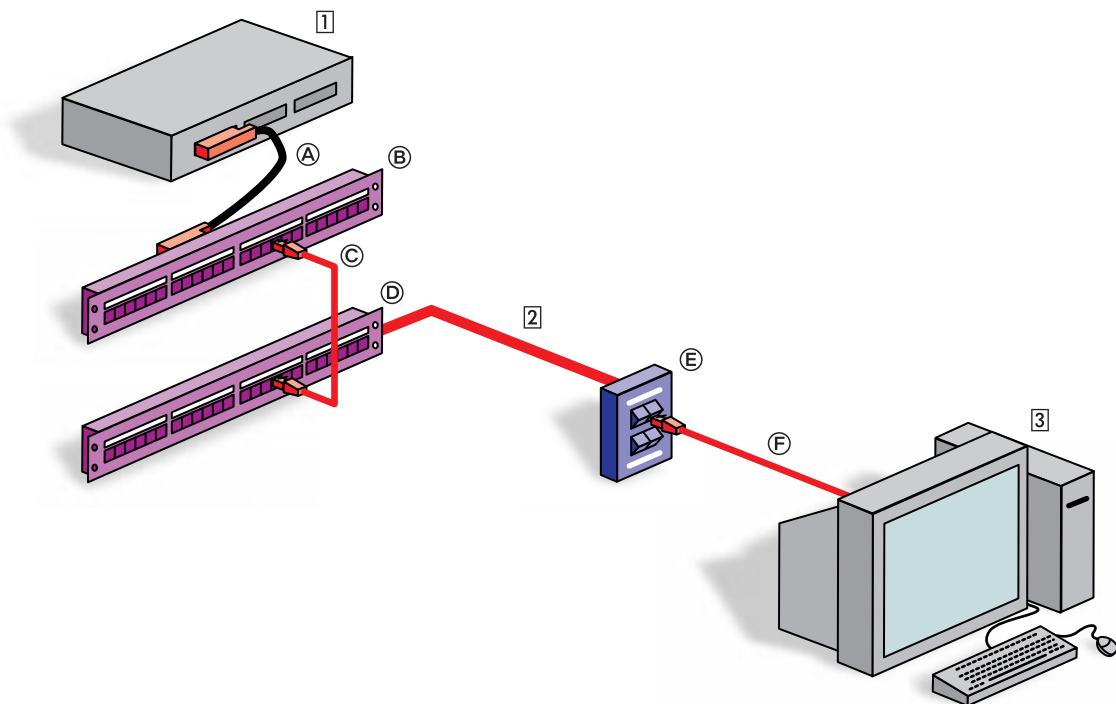
The IEEE 802.3 10BASE-T Standard specifies the mechanical link to the twisted-pair network as an 8-position modular jack that utilizes pins 1 and 2 for TD+ and TD- signals respectively and pins 3 and 6 for RD+ and RD- signals respectively. A system wired to TIA/EIA 568-A will fully support 10BASE-T applications.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 12-Port Modular 10BASE-T Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

25-PAIR 10BASE-T HUB

In addition to the standard modular jack, some hub manufacturers have chosen a 25-pair connector to distribute their ports. This scenario is depicted below.

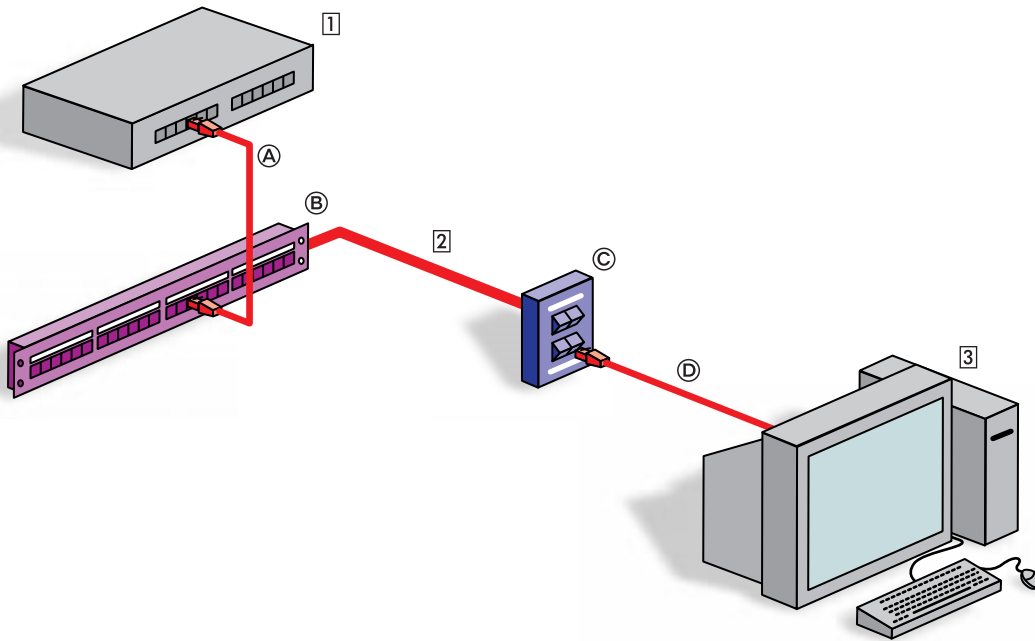


Siemon Product	Solution	
A 25-Pair Cable Assembly	B25B-DE-10 (page 6.10)	
B Patch Panel	CT-PNL-24-E2-01 (page 4.10)	
C Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
D Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
E Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
F Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 25-Pair 10BASE-T Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

1000BASE-T (COPPER)

The IEEE 802.3ab taskforce is developing a gigabit Ethernet solution that supports 1 gigabit per second (Gbps) transmission rates over 4-pairs of category 5 UTP cable.* The 1000BASE-T implementations will utilize new technology and new signal encoding schemes in order to satisfy their high bit rate objectives. 1000BASE-T solutions will be backward compatible with 10BASE-T and 100BASE-T technologies.

*Gigabit Ethernet over copper will be supported by the TIA and ISO worst case 100m channel topology and is expected to be supported by installed category 5 legacy cabling.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 1000BASE-T Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

1000BASE-SX/LX (FIBER)

The IEEE 802.3z taskforce has developed a gigabit Ethernet solution over fiber that supports half- and full-duplex transmission at speeds of 1Gbps (1000mbps). The 1000Base-SX standard was developed to support lower cost multimode fiber runs in horizontal and shorter-length backbone applications. The 1000Base-SX standard supports the multimode fiber distances shown in table 1.

The 1000Base-LX standard was developed to support longer-length multimode building fiber backbones and singlemode campus backbones. The 1000Base-LX standard supports multimode lengths of 550m and singlemode lengths of 3km.

1000Base-T solutions will be backward compatible with 10Base-T and 100Base-T technologies.

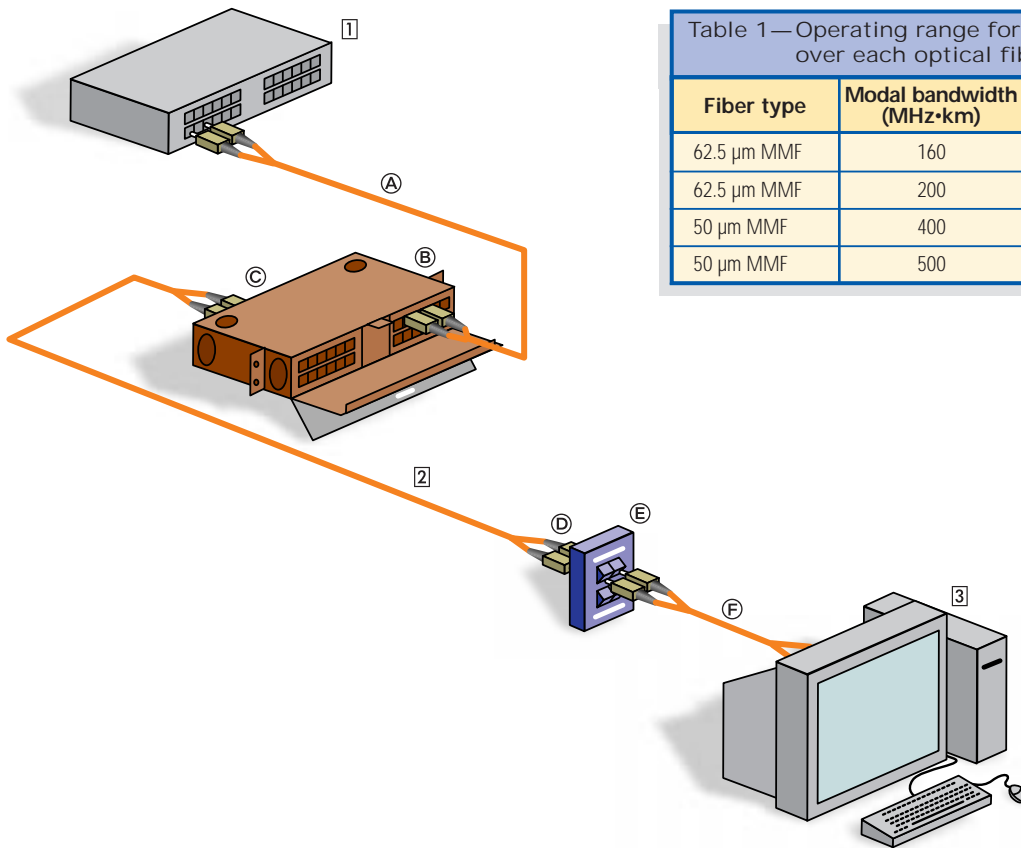


Table 1—Operating range for 1000Base-SX over each optical fiber type

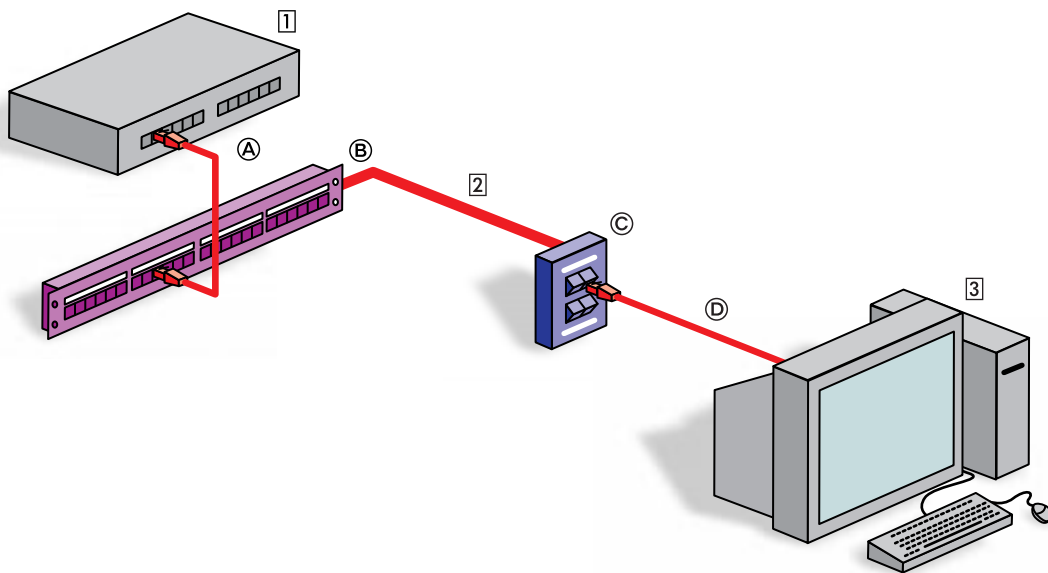
Fiber type	Modal bandwidth (MHz·km)	Minimum range (meters)
62.5 μm MMF	160	2 to 220
62.5 μm MMF	200	2 to 275
50 μm MMF	400	2 to 500
50 μm MMF	500	2 to 550

Siemon Product	62.5/125μm Fiber Solution	50/125μm Fiber Solution
A Fiber Jumper	FJ2-SCSC-MM-03 (page 3.9)	FJ2-SCSC-MM5-03 (page 3.9)
B Fiber Enclosure	RIC24-02 (page 3.3) & (4) RIC-SC6 (page 3.8)	
C Fiber Connector	FC2-SC-MM-B80 (page 3.10)	
D Fiber Connector	FC2-SC-MM-B80 (page 3.10)	
E Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-A-SC-SC-02 (page 1.7)	
F Fiber Jumper	FJ2-SCSC-MM-03 (page 3.9)	FJ2-SCSC-MM5-03 (page 3.9)
Customer Supplied		
1 1000BASE-SX/LX Hub		
2 2-strand Horizontal Optical Fiber	62.5/125μm	50/125μm
3 Work Area Equipment		

UTP TOKEN RING

Token Ring was originally designed to operate using 150 ohm shielded twisted-pair, or Type 1 cable. Because of the trend toward the use of unshielded twisted-pair cable, coupled with the revision of the IEEE 802.5 standard to accommodate operation over UTP, most LAN equipment manufacturers now offer Token Ring products for use with 100 ohm UTP. Today, the use of category 4 and category 5 unshielded twisted-pair cable for 4/16 Mbps Token Ring is common practice.

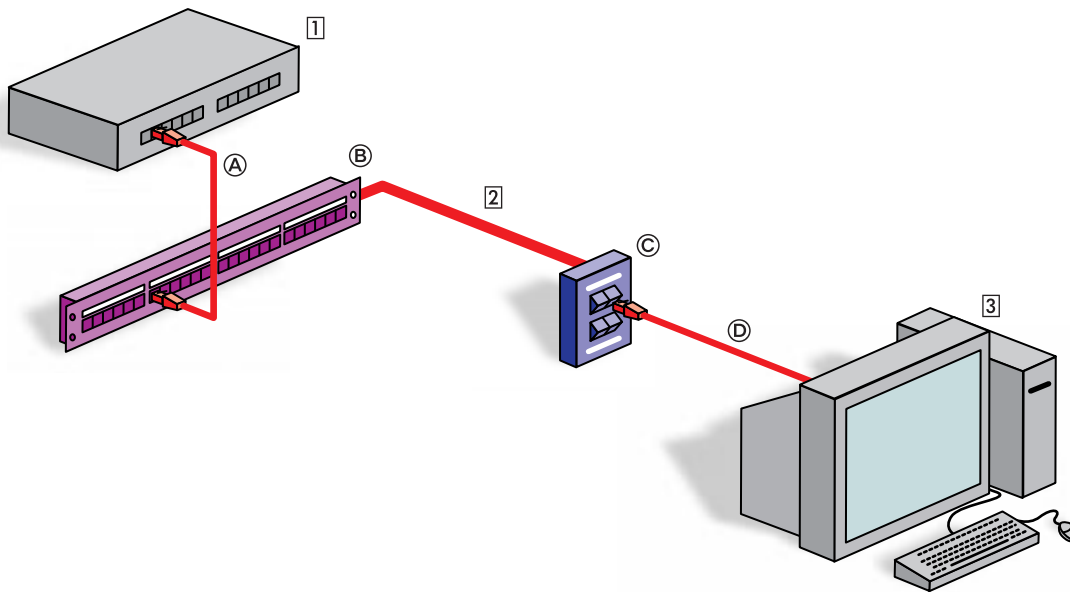
Token Ring is a star-wired, token passing network. Each node is wired in a star topology to a central location and connected to a hub called a Multi-station Access Unit or MAU. The system uses the four center conductors in an 8- or 6-position jack. Active devices send a signal or insertion voltage to the MAU to indicate their presence. Devices that fail or power down will be by-passed and switched out-of-ring.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 UTP Token Ring Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

TP-PMD

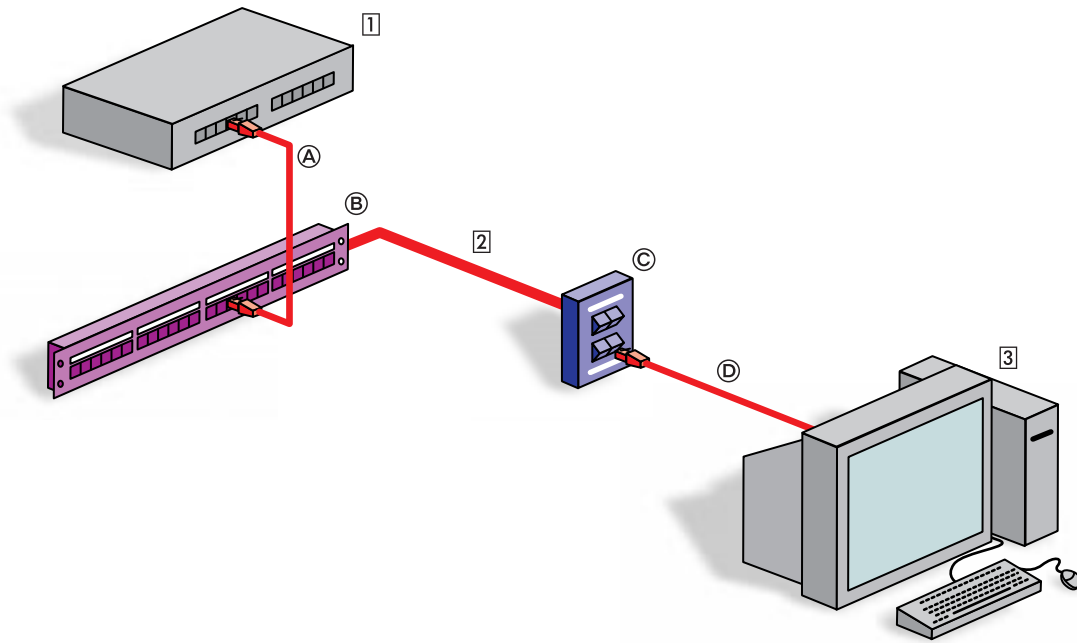
The TP-PMD or Twisted-Pair Physical Media Dependent standard (ANSI X3T9.5) will allow FDDI networks to run over twisted-pair cable. The intent is to create a high-performance, multi-station network. The protocol is designed to be effective at 100 Mbps using a star-wired Token Ring architecture and twisted-pair cabling as the transmission medium over link distances of up to 100 meters. The speed of this network requires the use of category 5 cable and connecting hardware.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 TP-PMD Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

ATM UTP SOLUTION

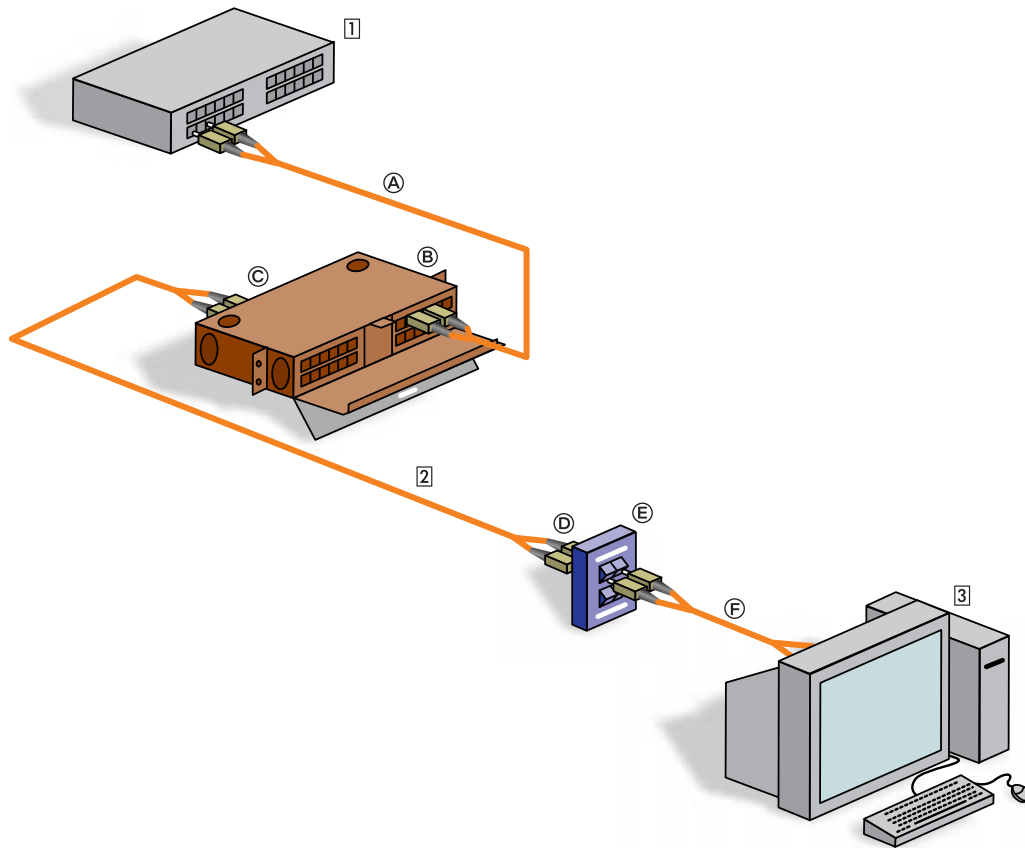
Asynchronous Transfer Mode, ATM, is an emerging network standard designed for high-speed, bandwidth-intensive communication for a wide range of service — voice, data, still image, or motion video. The ATM Forum is the prominent major industry forum active in formalizing specifications and is composed of hardware vendors, telecommunications service providers and potential ATM users. The ATM Forum has approved multiple data rates and media types for ATM networks. The use of 4-pair, category 5 UTP cabling is recommended because it will support all twisted-pair based ATM proposals. The network will use a star-wired configuration with link distances of up to 100 meters.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 ATM Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

ATM FIBER SOLUTION

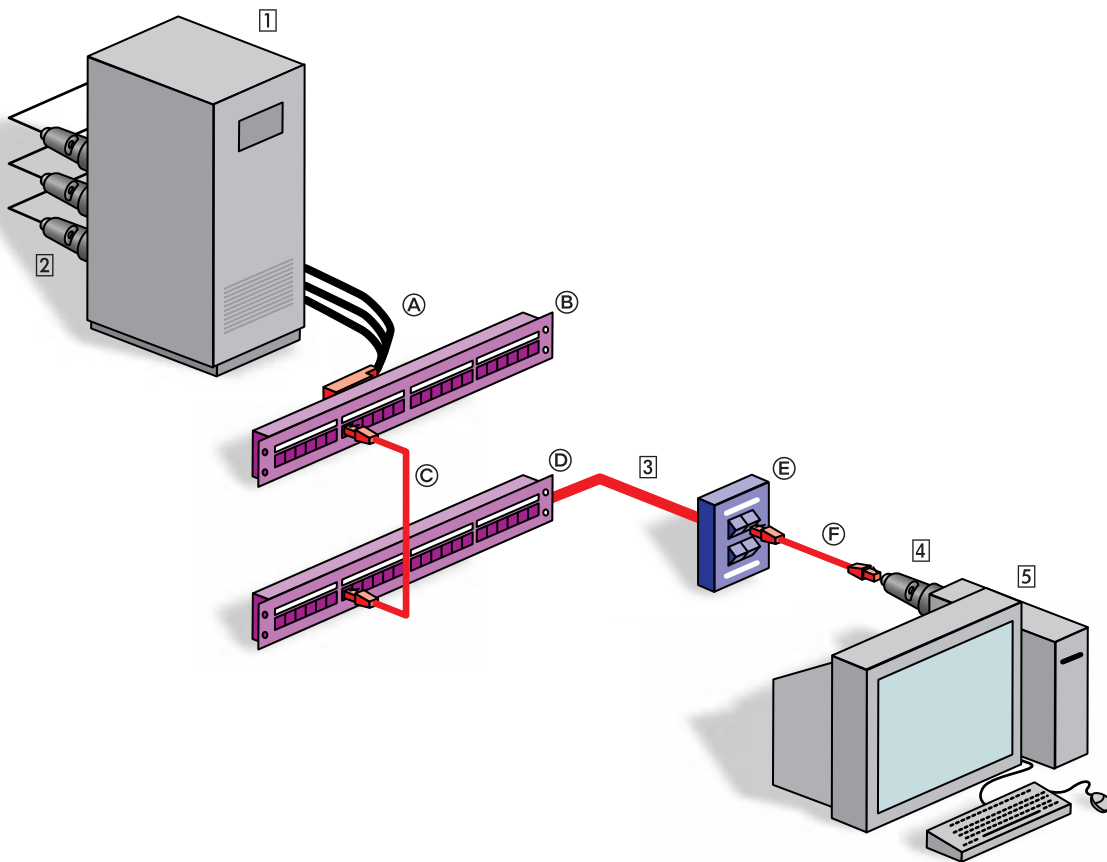
Although ATM technology was originally designed to operate over optical fiber, ATM networks are not limited to using any single physical transmission medium. Currently, ATM products are available that allow STP, UTP (Categories 3, 4, and 5), optical fiber, and coaxial cable to be used. However, while all these media types are supported, not all support the same transmission speeds. ATM transmission speeds range from 25 Mbps to 2.4 Gbps.



Siemon Product	62.5/125µm Fiber Solution	50/125µm Fiber Solution
A Fiber Jumper	FJ2-SCSC-MM-03 (page 3.9)	FJ2-SCSC-MM5-03 (page 3.9)
B Fiber Enclosure	RIC24-02 (page 3.3) & (4) RIC-SC6 (page 3.8)	
C Fiber Connector	FC2-SC-MM-B80 (page 3.10)	
D Fiber Connector	FC2-SC-MM-B80 (page 3.10)	
E Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-A-SC-SC-02 (page 1.7)	
F Fiber Jumper	FJ2-SCSC-MM-03 (page 3.9)	FJ2-SCSC-MM5-03 (page 3.9)
Customer Supplied		
1 ATM Fiber Hub		
2 2-strand Horizontal Optical Fiber	62.5/125µm	50/125µm
3 Work Area Equipment		

IBM 3270

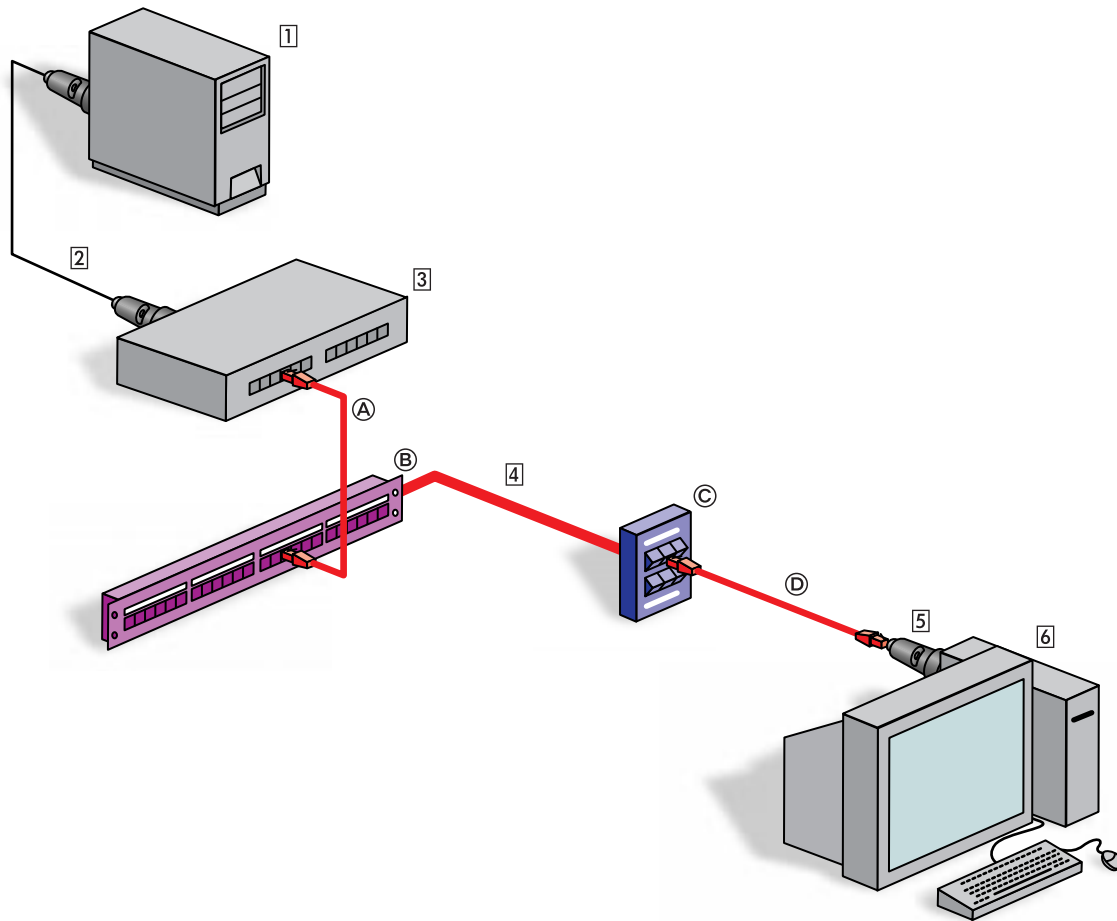
The IBM 3270 System consists of an IBM mainframe host computer connected to terminals. It utilizes IBM's Systems Network Architecture (SNA) and communication speeds up to 2.35 Mbps. Typically installed with 93 ohm coaxial cabling, IBM 3270 and other Category A devices can be wired in a star topology using category 3 unshielded twisted-pair cabling and baluns to support the coax-to-UTP media conversion.



Siemon Product	6 Solution	5e Solution
A Hydra Cable Assembly	HYD-M-24U1-10 (page 6.10)	
B Patch Panel	CT-PNL-24-E2-01 (page 4.10)	
C Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
D Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
E Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
F Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 IBM 3270 Controller		
2 Balun		
3 4-Pair Horizontal Cable	System 6™ approved cable	System 5e™ approved cable
4 Balun		
5 Terminal Device		

AS/400 AND SYSTEM/3X

The IBM AS/400 and System/3X were originally designed to operate over 100 ohm twinaxial cable. Each port on the control unit was connected to up to seven daisy-chained terminal devices. Today, many installations use baluns to balance the signal and allow the use of category 3 unshielded twisted-pair cable for data rates up to 10 Mbps. Horizontal cabling is configured in a star topology and then patched to a "Star Hub" that breaks out each controller port into seven station ports.

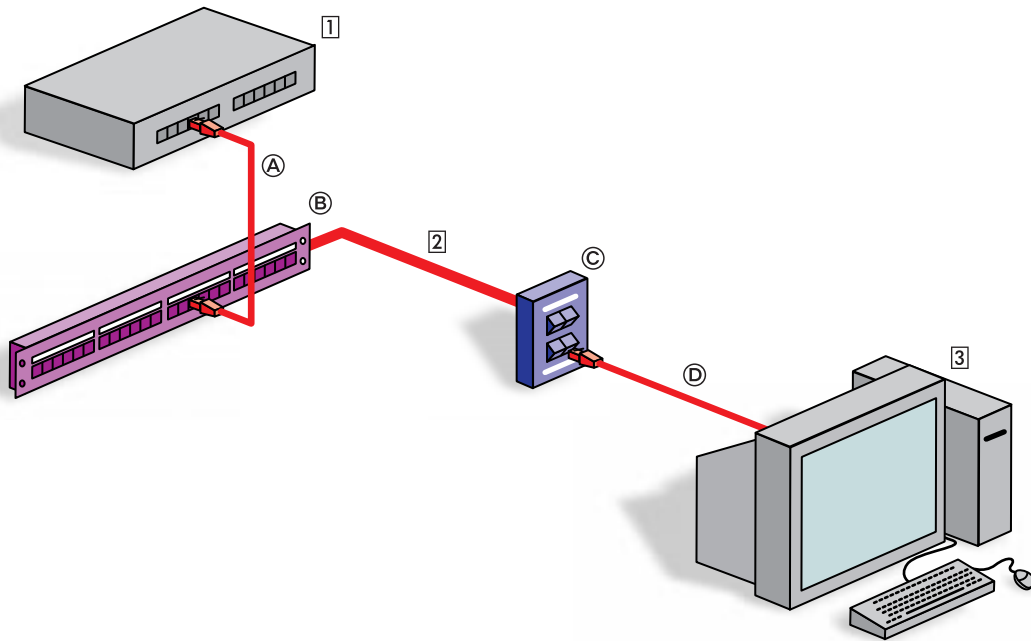


Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 AS/400 Control Unit		
2 Twinax Cable		
3 ACTIVE AS/400 UTP Star Hub		
4 4-Pair Horizontal Cable	System 6™ approved cable	System 5e™ approved cable
5 Balun		
6 Terminal Device		

100VG-ANYLAN

The IEEE has developed a set of standards (802.12) for the operation of 100Mbps Ethernet using a Demand Priority Access Method, commonly known as 100VG-AnyLAN. It utilizes a star topology cabling design and recognizes 4-pair 100Ω UTP and 62.5/125µm multimode fiber optic cabling.

The use of the star topology cabling design enables design enables a structured cabling system compliant with the TIA/EIA-568-A standard to fully support the operation of 100VG-AnyLAN.

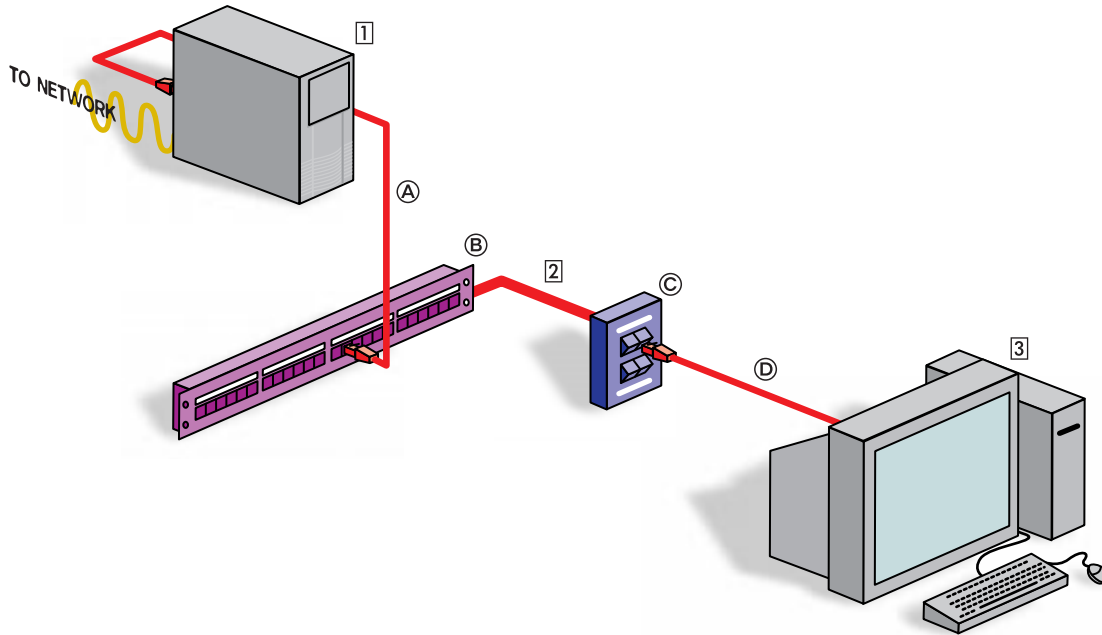


Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 100VG-AnyLAN Hub		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

ISDN

Integrated Services Digital Network is a standard that allows transmission of voice, data, facsimile, and video over a single communications channel on a digital network. It specifies an 8-position modular jack with T568A/T568B cabling. The data channels operate over a standard T-1 line (1.544 Mbps in the US or 2.048 Mbps in Europe).

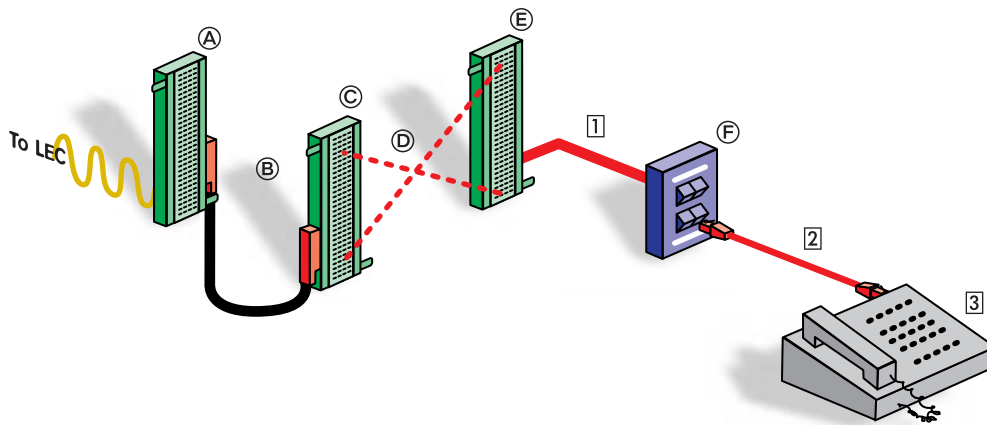
Network termination equipment provides access to ISDN services. Some examples of network termination equipment include PBXs, cluster controllers, LANs, and multiplexers. Terminal devices are configured in a star topology with each terminal wired back to the network termination equipment. Some examples of terminal devices include digital phones and data terminals.



Siemon Product	6 Solution	5e Solution
A Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
B Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
C Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
D Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 Network Termination Equipment		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Work Area Equipment		

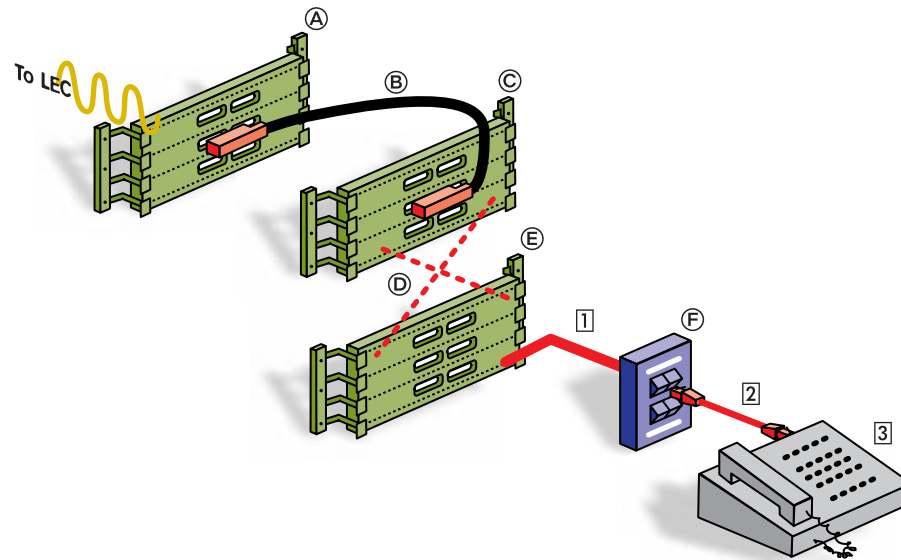
CENTREX-S66™ SOLUTION

Centrex is a business telephone service provided by the Local Exchange Carrier (LEC). It is a single line telephone service provided to individual users/phones. Centrex provides many of the same features as a PBX. These features can include intercoms, call forwarding, call transfer, call hold, least cost routing, and automatic call distribution. Centrex is wired using a star topology and requires one pair per phone from the central office to customer's premise and to each phone. The first pair from the horizontal/station field is cross-connected to the trunk field to activate the circuit.



Siemon Product	6 Solution	5e Solution
A S66™ Products	S66M1-50R (page 9.6) & (25) SMBC-2-7 (page 9.13)	
B 25-Pair Cable Assembly	B25B-DE-10 (page 6.10)	
C S66™ Products	157C (page 9.4)	
D Cross Connect	CJ5-W1-1000-06 (page 6.7)	
E S66™ Products	S66M1-50 (page 9.3)	
F Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
Customer Supplied		
1 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
2 Modular Cord (supplied with telephone)		
3 Telephone		

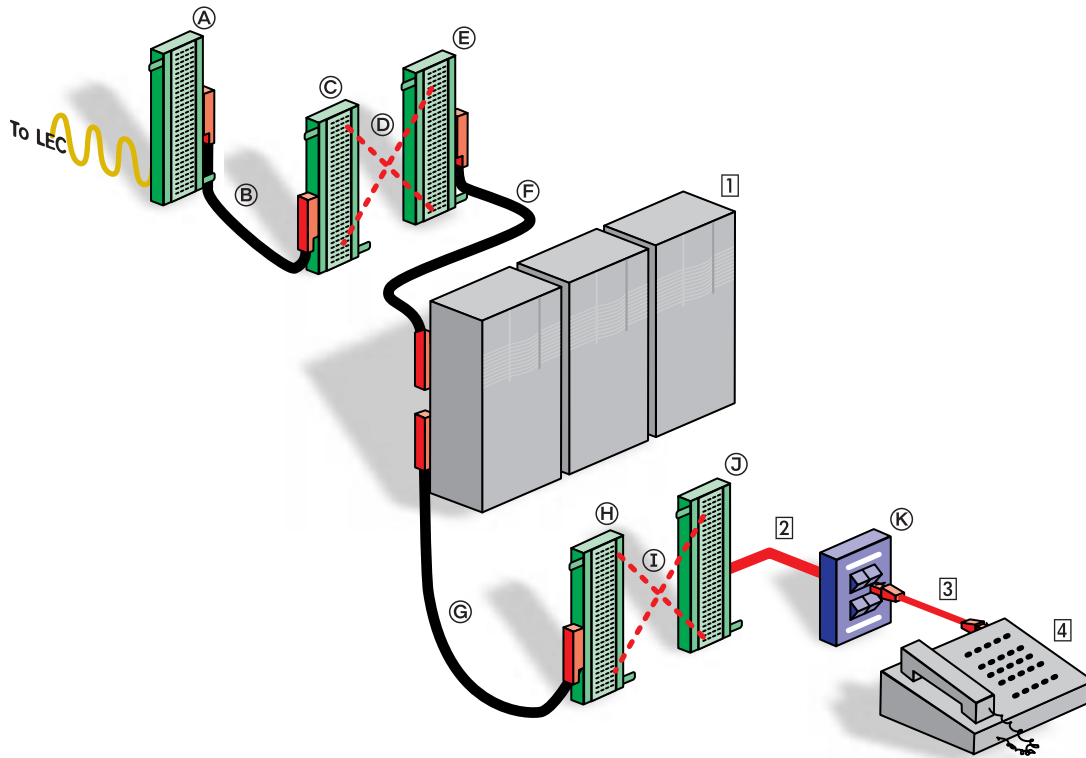
CENTREX-S110®/S210™ SOLUTION



Siemon Product	6 Solution	5e Solution
A S110®/S210™ Products	S700A110-B1-50 (page 8.13)	
B Cable Assembly	B25B-DE-10 (page 6.10)	
C S110®/S210™ Products	S700A110-B1-50 (page 8.13)	
D Cross Connect	CJ5-W1-1000-06 (page 6.7)	
E S110®/S210™ Products	S210AB2-64FT (page 7.3)	S110AB2-100FT (page 8.3)
F Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
Customer Supplied		
1 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
2 Modular Cord (supplied with telephone)		
3 Telephone		

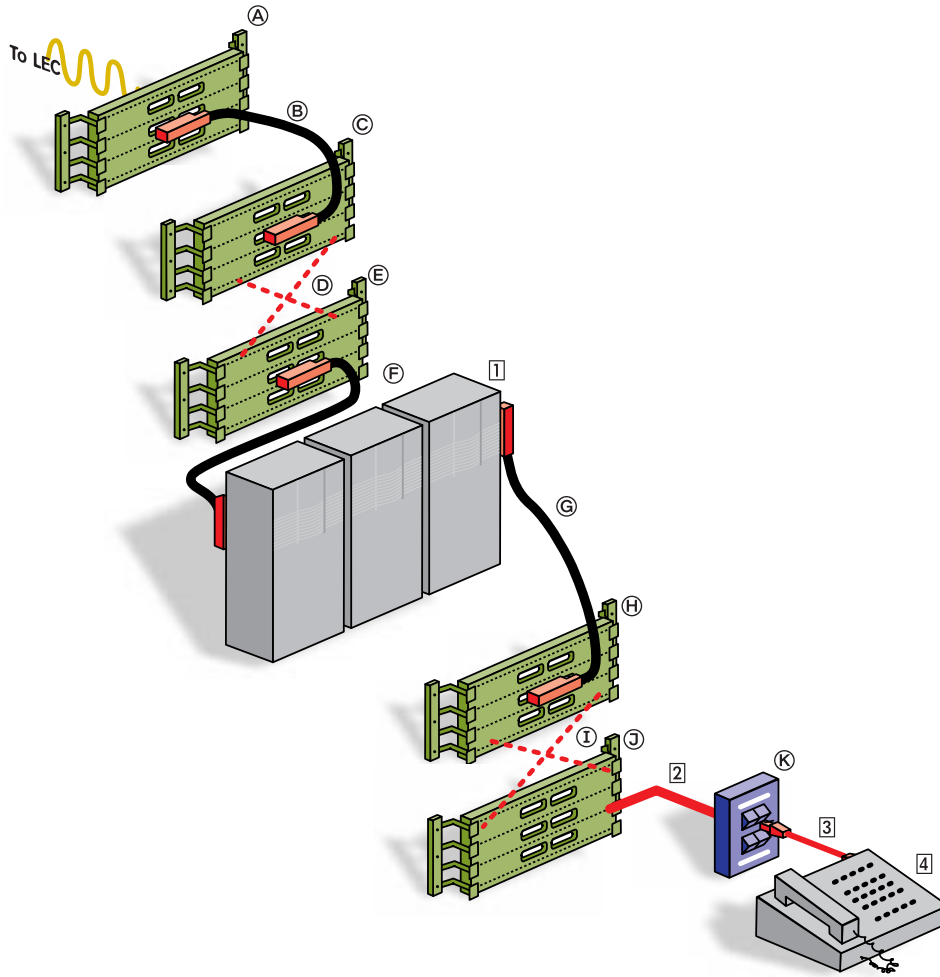
PBX – S66™ SOLUTION

A PBX (Private Branch Exchange) is a privately-owned telephone system that allows communications within a business as well as between the business and outside lines. Individual telephone extensions are used to access the PBX which will either route the call internally or switch it to the least cost outside line as required. It is cabled in a star topology with each extension wired back to the PBX. The backbone is typically multi-pair (multiples of 25-pair) unshielded twisted-pair cable and the horizontal cabling consists of individual 4-pair cables to each phone location.



Siemon Product	6 th Solution	5 ^e Solution
A S66™ Products	S66M1-50R (page 9.6) & (25) SMBC-2-7 (page 9.13)	
B Cable Assembly	B25B-DE-10 (page 6.10)	
C S66™ Products	157C (page 9.4)	
D Cross-Connect	CJ5-W1-1000-06 (page 6.7)	
E S66™ Products	157C (page 9.4)	
F Cable Assembly	B25B-DE-10 (page 6.10)	
G Cable Assembly	B25B-DE-10 (page 6.10)	
H S66™ Products	157C (page 9.4)	
I Cross-Connect	CJ5-W1-1000-06 (page 6.7)	
J S66™ Products	S66M1-50 (page 9.3)	
K Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
Customer Supplied		
1 PBX		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Modular Cord (supplied with telephone)		
4 Telephone		

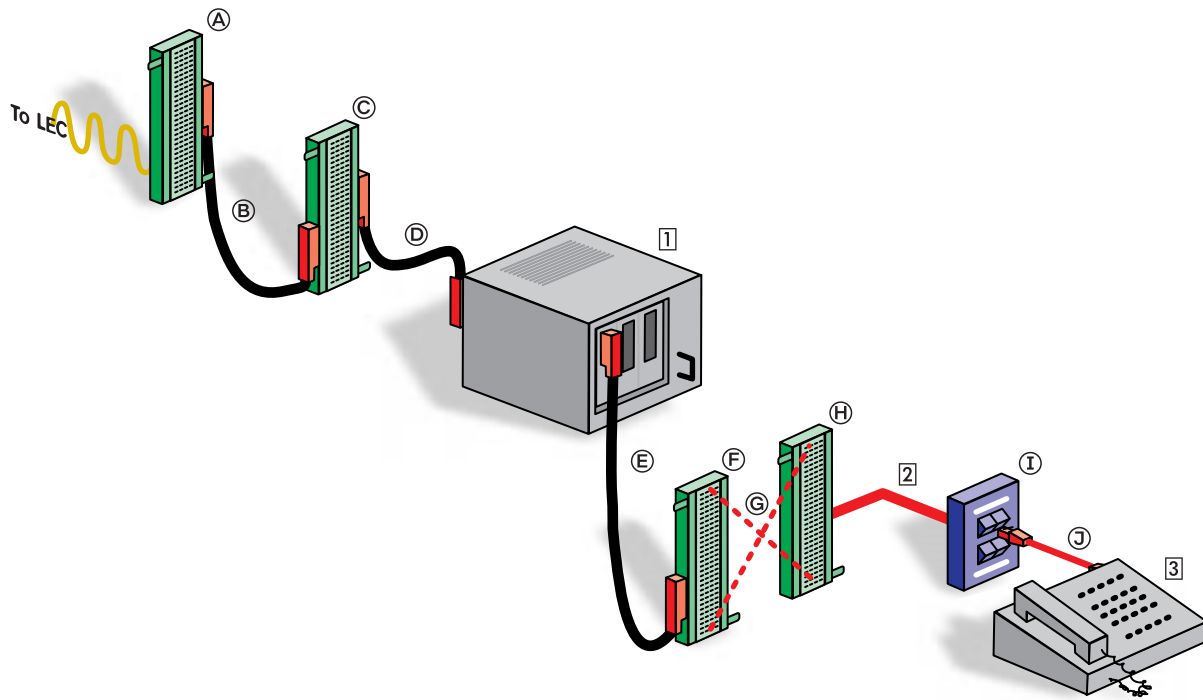
PBX – S110®/S210™ SOLUTION



Siemon Product	6 Solution	5e Solution
A S110® Products		S700A110-B1-50 (page 8.13)
B Cable Assembly		B25B-DE-10 (page 6.10)
C S110® Products		S700A110-B1-50 (page 8.13)
D Cross-Connect		CJ5-W1-1000-06 (page 6.7)
E S110® Products		S700A110-B1-50 (page 8.13)
F Cable Assembly		B25B-DE-10 (page 6.10)
G Cable Assembly		B25B-DE-10 (page 6.10)
H S110® Products		S700A110-B1-50 (page 8.13)
I Cross-Connect		CJ5-W1-1000-06 (page 6.7)
J S110®/S210™ Products	S210AB2-64FT (page 7.3)	S110AB2-100FT (page 8.3)
K Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
Customer Supplied		
1 PBX		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
3 Modular Cord (supplied with telephone)		
4 Telephone		

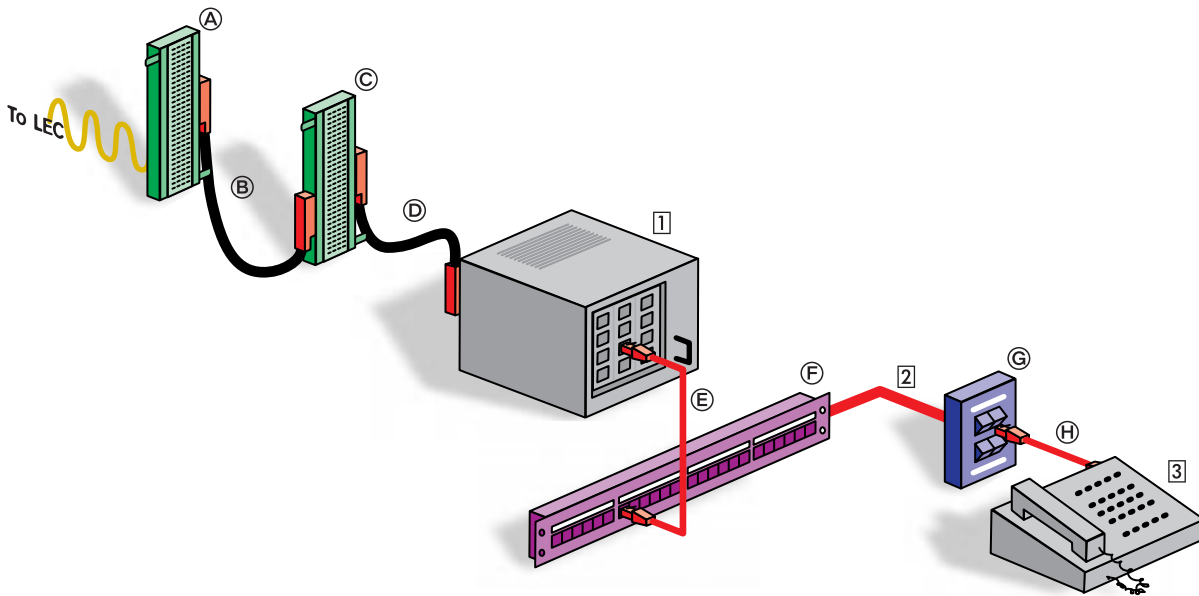
25-PAIR KEY SYSTEM

Most electronic key systems today are designed for simple installation. The Key Service Unit (KSU) is usually wall mounted close to both horizontal cabling and the telephone company's demarcation point. Connections to the KSU are accomplished using either 25-pair connectors or modular jacks. The system is configured in a star topology with each extension wired back to the KSU.



Siemon Product	6 th Solution	5e th Solution
A S66™ Products	S66M1-50R (page 9.6) & (25) SMBC-2-7 (page 9.13)	
B Cable Assembly	B25B-DE-10 (page 6.10)	
C S66™ Products	S66M2-5W (page 9.4) & (25) SMBC-2-8 (page 9.13)	
D Cable Assembly	B25B-DE-10 (page 6.10)	
E Cable Assembly	B25B-DE-10 (page 6.10)	
F S66™ Products	157C (page 9.4)	
G Cross-Connect	CJ5-W1-1000-06 (page 6.7)	
H S66™ Products	S66M1-50 (page 9.3)	
I Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
J Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 Key System		
2 4-Pair Horizontal Cabling	System 6 th approved cable	System 5e th approved cable
4 Telephone		

MODULAR KEY SYSTEM



Siemon Product	6 Solution	5e Solution
A S66™ Products	S66M1-50R (page 9.6) & (25) SMBC-2-7 (page 9.13)	
B Cable Assembly	B25B-DE-10 (page 6.10)	
C S66™ Products	S66M2-5W (page 9.4) & (25) SMBC-2-8 (page 9.13)	
D Cable Assembly	B25B-DE-10 (page 6.10)	
E Patch Cords	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-02 (page 6.4)
F Patch Panel	HD6-24 (page 4.3)	HD5-24T4 (page 4.5)
G Work Area Outlet Assembly	CT2-FP-02 (page 1.11) & CT-C6-02 (page 1.3)	CT2-FP-02 (page 1.11) & CT-5-T4-02 (page 1.5)
H Patch Cord	MC6-8-T-10-02 (page 6.3)	MC5-8-T-10-20 (page 6.4)
Customer Supplied		
1 Key System		
2 4-Pair Horizontal Cabling	System 6™ approved cable	System 5e™ approved cable
4 Telephone		