

## Datacom / Telecom Glossary

<u>Term</u>	<u>Definition</u>
<b>100BASE-T</b>	The twisted pair version of 100 Mbps Ethernet.Requires Category 5 cabling.
<b>10BASE2</b>	Also called Thinnet.10 Mbps Ethernet on thin (RG58) coaxial cable.
<b>10BASE5</b>	Also called Thicknet.10 Mbps Ethernet on thick coaxial cable.
<b>10BASE-T</b>	10 Mbps Ethernet on twisted-pair (Category 3) cable.
<b>110 Connector</b>	A popular insulation displacement connector (IDC) used modular jacks, patch panels and cross connects.
<b>3270 (IBM)</b>	A mainframe computer.Originally implemented on RG62 coax.Now generally implemented on UTP cable using baluns.
<b>66 Block</b>	A legacy cross connect system.Similar in function to AMP 110Connect XC.
<b>AS/400 (IBM)</b>	A midrange computer system.Originally implemented on twinaxial cable.Now generally implemented on UTP cable using baluns.
<b>Attenuation</b>	The amount of signal lost as it travels through the cabling system.
<b>Backboard</b>	Refers to a plywood panel mounted on the wall of a telecom closet.Used to mount the cross connect.
<b>Backbone cabling</b>	Cabling between floors in a building or between buildings in a campus.
<b>Balun</b>	A transformer used to attach coaxial or twinaxial equipment to twisted pair cabling.
<b>BNC</b>	A bayonet style coaxial connector.
<b>Category 3</b>	A performance classification for twisted pair cables, connectors and systems.Specified to 16 MHz.Suitable for voice and data applications up to 10 Mbps.
<b>Category 5e</b>	A performance classification for twisted pair cables, connectors and systems.Specified to 100 MHz.Suitable for voice and data applications up to 155 Mbps (possibly 1000 Mbps).
<b>Category 5E</b>	Also called Enhanced Category 5. A performance classification for twisted pair cables, connectors and systems.Specified to 100 MHz.Suitable for voice and data applications up to 1000 Mbps.
<b>Category 6</b>	A performance classification for twisted pair cables, connectors and systems.Specified up to 250 MHz.
<b>Channel</b>	The entire horizontal cabling system. Everything between the computer and the LAN hub in the telecom closet, excluding the equipment connections.
<b>Coax</b>	Short for coaxial.Single-conductor cables with braided shields.Used in the 80's for data transmission.Now generally replaced with UTP for data.Still used for video.
<b>Consolidation point</b>	An interconnect device that allows the horizontal cable to be split into two parts.Used for zone cabling.
<b>Cross connect (XC)</b>	Connecting hardware used to patch between two groups of cables (horizontal to backbone, for example).AMP 110Connect XC.
<b>Data rate</b>	The speed, measured in bits per second, that a particular network (or other application) transmits data.
<b>dB</b>	Abbreviation for decibel. The logarithmic ratio of two powers, voltages or currents.
<b>Delay skew</b>	The difference in propagation delay between the slowest and fastest pairs in a cable or system.
<b>Drop</b>	Refers to the horizontal cabling for one work area, as in "The job has 100 drops."
<b>ELFEXT</b>	Equal Level Far End Crosstalk. A measure of FEXT which accounts for the attenuation of the cabling system.
<b>Enhanced Category 5 (Cat 5E)</b>	Also called Category 5e.A performance classification for twisted pair cables, connectors and systems.Specified to 100 MHz.Suitable for voice and data applications up to 1000 Mbps.
<b>Ethernet</b>	The most common network protocol in use.A protocol is a set of rules enabling data communications. Based originally on a bus topology.
<b>F connector</b>	A common coaxial connector used for video applications (CATV).
<b>FEXT</b>	Far End Crosstalk. Unwanted noise coupled onto a receive pair from a transmit pair at the far end of the system.
<b>Gbps</b>	A data rate. Gigabits per second.A gigabit is one billion bits.
<b>Gigabit Ethernet</b>	The newest (1999) and fastest version of Ethernet.Data rate is 1000 Mbps or 1 Gigabit per second.
<b>Horizontal cabling</b>	Includes the work area outlet, distribution cable and connecting hardware in the telecom closet.
<b>Hub</b>	Network device, usually in the telecom closet, that stations connect to.
<b>IDC</b>	Insulation Displacement Connector.A style of connector that slices through the cable insulation to make a connection.Eliminates the need to strip insulation.
<b>IEEE</b>	Institute of Electrical and Electronics Engineers. 802 Group develops Local Area Network standards and Metropolitan Area Network standards.
<b>IEEE 802.3</b>	Usually referred to as Ethernet.A networking protocol. .
<b>IEEE 802.5</b>	Usually referred to as token ring.A networking protocol.
<b>Impedance</b>	The total opposition to the flow of alternating current in a conductor.
<b>Jumper</b>	Usually unjacketed twisted pair wire used to make a cross connection.
<b>Kbps</b>	A data rate. Kilobits, or thousands of bits, per second.

<b>LAN</b>	Local Area Network. Usually confined to one building or even one floor. Large companies may have several LANs connected by an internetwork or backbone network.
<b>Link</b>	The part of the horizontal cabling system between the work area outlet and the telecom closet termination.
<b>MAC</b>	Moves Adds and Changes: When data and voice services (to include: outlets and cabling, patching, etc.) of a given location are moved to a new location or removed completely.
<b>Mbps</b>	A data rate. Megabits, or millions of bits, per second.
<b>MHz</b>	Megahertz. Millions of cycles (Hertz) per second. A frequency or frequency range (bandwidth) through which a cabling system is specified.
<b>Modular jack</b>	The standard female connector for twisted pair cable. A "telephone jack".
<b>Modular plug</b>	The standard male connector for twisted pair cable. A "telephone plug".
<b>MT-RJ</b>	A small form factor, dual fiber connector.
<b>Multimode</b>	A type of optical fiber in which the light travels in multiple paths. Utilizes LEDs or lasers as light sources.
<b>Multi-user outlet</b>	A work area outlet designed to support multiple users. Also called multi-user telecommunications outlet assembly or MUTOA.
<b>MUTOA</b>	See multi-user outlet.
<b>NEXT</b>	Near End Crosstalk. The unwanted noise coupled into a device's receive circuit from its transmit circuit.
<b>NIC</b>	Network interface card. Allows a PC to attach to a network.
<b>Node</b>	A device connected to a network.
<b>Outlet</b>	Where the horizontal cabling terminates in the work area.
<b>Patch cord</b>	A cable assembly with (usually) a plug on each end, used to make a cross connection.
<b>Patch panel</b>	A rack-mountable panel (usually 19" wide) containing connecting hardware. Used to patch between groups of cables and equipment.
<b>PBX</b>	Private Branch Exchange. The premises telephone switch. Handles telecom functions.
<b>Plenum</b>	A chamber that houses environmental air transfer. Plenum-rated cable is required in such locations.
<b>Power sum</b>	A mathematical addition of noise from multiple disturbers. Applied to NEXT and ELFEXT requirements.
<b>Propagation delay</b>	The amount of time it takes a signal to travel through a cable or system.
<b>Propagation delay skew</b>	The difference in propagation delay between the slowest and fastest pairs in a cable or system.
<b>PS ELFEXT</b>	See power sum and ELFEXT.
<b>PS NEXT</b>	See power sum and NEXT.
<b>Punchdown</b>	Refers to IDC connectors and the method used to terminate them.
<b>Rack</b>	Used to mount patch panels, enclosures and equipment in the telecom closet. Usually 19" wide by 7' high.
<b>Return loss</b>	A measure of the signal reflected back toward the transmitter as a result of impedance variations in the cabling system.
<b>Riser</b>	Backbone cabling connecting telecom closets situated vertically on separate floors.
<b>RJ11</b>	A wiring pattern for 6-position modular jacks. Used to refer to the jacks themselves.
<b>RJ21</b>	A wiring pattern for a 25-pair (AMP CHAMP) connector. Also used to refer to the connectors themselves.
<b>RJ45</b>	A wiring pattern for 8-position modular jacks. Used to refer to the jacks themselves.
<b>SC connector</b>	A duplex optical fiber connector. The standard connector for optical fiber per the 568 cabling standard.
<b>Singlemode</b>	A type of optical fiber in which the light travels in a single path. Utilizes lasers as a light source.
<b>ST connector</b>	A bayonet style optical fiber connector. An alternate style per the 568 standard.
<b>STP</b>	Shielded Twisted Pair. 2-Pair 150 ohm shielded cable.
<b>Switch</b>	A type of network hub. Provides higher bandwidth than shared hubs.
<b>System/3X (IBM)</b>	The predecessor of the AS/400.
<b>T568A and B</b>	The two standard wiring patterns for 8-position modular jacks.
<b>Telco</b>	Short for telecommunications (or telephone company).
<b>Telco connector</b>	Refers to a 25-pair (AMP CHAMP) connector.
<b>Telecom closet</b>	Telecommunications closet. The area of the building that houses the termination of the horizontal cabling. May also contain LAN electronics.
<b>Thicknet</b>	IEEE 10BASE5. 10 Mbps Ethernet on thick coaxial cable.
<b>Thinnet</b>	IEEE 10BASE2. 10 Mbps Ethernet on thin (RG58) coaxial cable.
<b>Token ring</b>	A networking protocol based on a token-passing ring.
<b>Twisted pair cable</b>	Cable made from pairs of wires which have been twisted together.
<b>UTP</b>	Unshielded twisted pair cable. Cable made from pairs of wires which have been twisted together.
<b>Wiring closet</b>	See telecom closet.
<b>Work area</b>	Where the users' communications equipment resides. The part of the cabling system between the outlet and the equipment.
<b>Zone cabling</b>	An architectural concept which splits the horizontal cabling into two sections. Eliminates the need to replace the entire horizontal cable in moves, adds and changes.