ATKINS
Data & Telephone Services

ATKINS DTS Guide to Network Cabling

The varied types of cable available for networking, phone and other uses often results in confusion over the appropriate type for a given installation. The guide is designed to provide an overview of the various cable types and the categories most commonly used for business networking and telephony. We encourage you to call Atkins DTS with any questions about your structured cabling needs. As cable technology progresses, this guide will be updated. We encourage you to visit our website frequently for the latest information.

Common Cable Types

Coaxial Cable

Unshielded Twister Pair Cable

Fiber Optic Cable

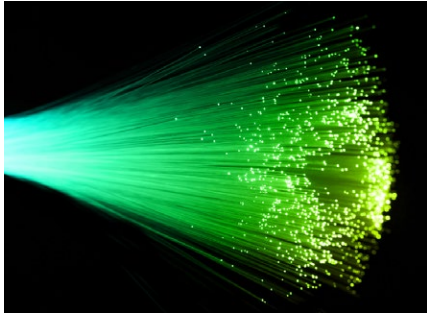| Category	Common Use	Notes
Cat 1	Telephone & ISDN	Appropriate for traditional telephone and ISDN wiring. Not capable of reliable data networking.
Cat 2	Token Ring & LocalTalk Networks	Capable of data networking up to 4 Mbps
Cat 3	Traditional 10BaseT Ethernet	Capable of data networking up to 10 Mbps
Cat 4	Token Ring Networks	Capable of data networking up to 16 Mbps
Cat 5	Ethernet, Fast Ethernet & Token Ring Networks	Capable of data networking up to 100 Mbps
Cat 5e	Gigabit Ethernet	Capable of data networking up to 1000 Mbps
Cat 6	Gigabit Ethernet	Capable of data networking up to 1000 Mbps

Structured Cabling

Atkins DTS provides end-to-end engineering solutions for data networking and telephony. Using your structural drawings, Atkins DTS can create a full networking diagram and implementation plan. We source the cable and materials, provide the expertise and install everything from the cable to the hardware.
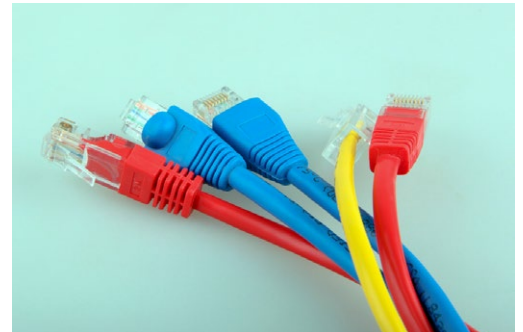

Fiber Optics

Fiber optic cabling relies on pulses of light to transmit data through fiber lines instead of using electronic pulses like traditional copper cabling. The result is greater bandwidth; the ability to transmit data faster than with traditional wiring. Fiber optic networks require a transmitter-receiver design and are more complex to install that traditional networks. However, the advantages of fiber optics include: higher bandwidth & speed; greater length in cable runs, and; higher resistance to electromagnetic interference.

For the complexity of fiber optics, you need an IT provider you can trust - Atkins DTS has certified expertise in fiber optic design, installation and management. Let us show you how to upgrade your installation or we can help you design a totally new network.

CAT5 and CAT6

CAT5 and CAT6 cabling both offer Gigabit ethernet speeds with traditional copper wiring. CAT5 only utlizes two of the four wiring pairs while the newer CAT6 specifications makes Gigabit ethernet more reliable by utilizing all four pairs.

Naturally, all cable types have their limitations and advantages. Atkins DTS can help you understand the role of cabling type in your overall network design, security and performance. By taking a total system approach, ATKINS DTS can help you determine the best technology to implement for your objectives and budget. Atkins DTS installs the latest cabling technologies depending on the needs and objectives of the network. Our team is continually trained & certified on the latest innovations.

About Atkins Data & Telephone Services, LLC

Atkins DTS approaches telephone and data services from the bottom up. Led by technology veteran Tim Atkins, the Atkins DTS team is a family of professionals educated, trained and certified in their respective areas of expertise. These experts in data and telephone solutions work together during business and relax together during off hours. The result is a strong, cohesive team that knows the technology and understands the needs of business.