Summary of Answer from AIs for "What is UTP Cable?"

	ChatGPT (Free Version)	Copilot(Free Version)	DeepSeek(Japanese Mobile App Version)
Explanation：	UTP cable (Unshielded Twisted Pair cable) is a type of cable used in network communications and telephone lines. UTP cable stands for “Unshielded Twisted Pair” and is an unshielded twisted pair cable. The structure of two copper wires twisted together has the effect of reducing external electromagnetic interference (EMI) to some extent, but because it is unshielded, it is susceptible to strong noise environments.	UTP cable (Unshielded Twisted Pair cable) is an unshielded twisted pair cable.	UTP cable (Unshielded Twisted Pair cable) is a type of cable widely used in network communications. It is mainly used for Ethernet connections and is indispensable for building LANs (Local Area Networks) and Internet connections.
Purpose:	Widely used in telecommunications, such as LAN networks (e.g., Ethernet cables) and telephone lines.	UTP cables are mainly used in LANs (Local Area Networks) and are widely used for network connections in homes and offices. 1. Straight cable: Used to connect different devices such as a PC and a router. The wires on both ends of the connector are arranged in the same order. 2. crossover cable: Used to directly connect the same type of equipment, such as computers to computers. The wires at one end of the connector are crossed.	* LAN cables: Used in offices and homes to connect computers, printers, routers, etc. * Internet connection: Also used to connect broadband routers and modems. * IP phones and surveillance cameras: Also used to connect communication devices over a network.
Features:	*"Unshielded" = no shielding → no metal shield to block external noise *"Twisted Pair" = twisted pair → two copper wires twisted together *Mainly used as LAN cables (Ethernet cables)	It is made by twisting two copper wires together into one, and since it does not have any shielding to protect against external electromagnetic interference, it is low cost and highly flexible.	As the name “Unshielded” implies, UTP cables are not shielded against external electromagnetic interference (noise). Instead, the internal copper wires are in pairs (twisted pairs), which are twisted together to reduce the effects of noise.
Type (category):	UTP cables are divided into categories (Cat) according to transmission speed and performance. Here are some common ones: * Cat5e (100Mbps to 1Gbps): For homes and small offices * Cat6 (1Gbps to 10Gbps): for environments requiring high-speed communication * Cat6a / Cat7 / Cat8 (10Gbps to 40Gbps): for data centers and high-speed networks	UTP cables are divided into categories according to performance and features, and the categories are as follows: * Cat5: Maximum transmission speed of 100 Mbps * Cat5e: Maximum transmission speed of 1 Gbps * Cat6: Maximum speed of 1 Gbps * Cat7: Maximum transmission speed of 10 Gbps The higher the category, the higher the communication speed, but also the higher the price.	UTP cables are divided into categories (Cat) according to performance, with the higher number corresponding to higher speed communication. For example, Cat5e can communicate up to 1 Gbps, and Cat6 up to 10 Gbps.