hp CAT 5e networking and telecommunications connectivity cables

CAT 5e cable

performance

As network and telecommunication applications become more complex, increased data transport is required to accommodate fast data transfer speeds. CAT 5 is typically used in Local Area Networks (LAN) and premise cabling.

Category 5e cabling is an enhanced version of CAT 5 cabling. The main difference between CAT 5 and CAT 5e cabling is the specifications. The amended specifications provide full-duplex Fast Ethernet cabling. CAT 5e uses better insulation to improve attenuation and crosstalk performance. An additional plastic rib has been placed in the center of CAT 5e cabling to reduce crosstalk. A twist internal to the jack prevents untwisting and crosstalk to other wire pairs. Some of the benefits of CAT 5e interconnect include:

- speed: can carry speeds up to 100 Mb/second, will expand to 10 Gigabits/second in the future
- bandwidth: greater bandwidth than CAT 3, 4
- distance: HP cables support distances up to 50 ft
- price: CAT 5 cabling is much cheaper than fiber and coax cable
- reliable: the most implemented and proven standards
- size, weight and flexibility: smaller connectors allow for high port density, the cable is lightweight, and the jacket is flexible

- better noise immunity: twisted pair cabling and balanced transmission provide less noise
- plug and play: easy to set up

HP offers Duplex Fast Ethernet cables in various lengths. HP CAT 5e cables are:

- designed and tested to specifically connect your Hewlett-Packard computing devices, insuring 100% compatibility
- designed to stringent specifications for less crosstalk
- designed and tested by HP to ensure optimal transmission speeds are achieved and requirements met to create reliable Gigabit Ethernet and data networks

guaranteed compatibility, reliability, and performance

products

straight-pinned product number	technology	connector	gender	length
C7533A CAT 5e Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	4 ft
C7535A CAT 5e Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	7 ft
C7536A CAT 5e Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	14 ft
C7537A CAT 5e Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	25 ft
C7542A CAT 5e Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	50 ft
C7543A CAT 5e Cable Kit (Ten C7536A Cables)	Duplex Fast Ethernet	RJ45 to RJ45	M/M	
cross-pinned product number	technology	connector	gender	length
C7539A CAT 5e Crossover Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	7 ft
C7538A CAT 5e Crossover Cable	Duplex Fast Ethernet	RJ45 to RJ45	M/M	25 ft

quality & compatibility

- HP designs and tests all cables to meet and exceed industry standards specifications.
- meets ANSI/EIA/TIA 568A-5 standards
- each cable internally contains four individual twisted pair cables
- connectors are CAT 5e rated connectors
- terminated either T568A or T568B pair assignment on both ends
- applications can be accommodated by CAT 5e cabling systems include voice, modems, RS-232 Appletalk, 3270 with baluns, ISDN, T1, 4- and 16-mbps Token Ring, 10BASE-T, 100 BASE-T and 1000 BASE-T
- optional straight or crossover cables

hp advantage

- guaranteed compatibility with your HP computing equipment
  - reduce down time
- maximize investment by utilizing existing backbone infrastructure
- price performance
  - low cost solution for networking applications

CAT 5e cable

technical specifications

	CAT 5	CAT 5e
Frequency	• 100 Mhz	• 100 Mhz
Attenuation (minimum at 100 Mhz)	• 22 dB	• 22 dB
Characteristic Impedance	• 100 ohms + 15%	• 100 ohms + 15%
NEXT (minimum at 100 Mhz)	• 32 dB	• 35.3 dB
PS- NEXT (minimum at 100 Mhz)	• (no specification)	• 32.3 dB
ELNEXT (minimum at 100 Mhz)	• (no specification)	• 23.8 dB
PS LEFEXT (minimum at 100 Mhz)	• (no specification)	• 20.8
Structural Return Loss (minimum at 100 Mhz)	• 16 dB	• (no specification)
Return Loss (minimum at 100 Mhz)	• (no specification)	• 20.1 dB
Delay Skew (maximum per 100m)	• (no specification)	• 45 ns

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