



CAT.5E HDC cable HDC-C5E

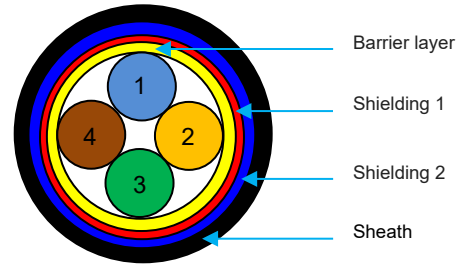
The CAT.5E HDC cable is a double-shielded twisted pair cable that is engineered for optimum video signal transmission with IDK's HDC series products (twisted pair cable extenders and splitters).

The CAT.5E HDC cable supports 500 MHz bandwidth at distance up to 328 ft. (100 m). The double-shielded structure protects video signal from outside interference. In order to maximize the performance of the CAT.5E HDC cable, use IDK's transmitters and receivers with STP's RJ-45 connector and keep the cable grounded.

The CAT.5E HDC cable can transmit 4K video up to 328 ft. (100 m) when it is connected to IDK's 4K product. If connecting 4K compliant product, the CAT.5E HDC cable can transmit video signals of 4K resolution up to 328ft. (100 m).

PoH-compliant devices can be powered.

Specification							
Structure	SF/UTP 4 Unshielded Twisted pair, 24 AWG solid tinned annealed copper Double shielding: Double-faced aluminum foil tape + Tinned annealed copper wire braid (Density: 90% or more)						
Certification	UL20276 (Rating 176°F (80°C), 30 V)						
Standards	ANSI/TIA-568-C.2 Enhanced Category 5						
RoHS	Yes						
Operating temperature range	14°F to 140°F (-10°C to +60°C)						
Printing on sheath	xxxM AWM 20276 VW-1 80C 30V E59568-A IDK Corporation CAT.5E HDC-CABLE AWG24-4P-SASB Meter marks ("xxxM") are printed with a distance of one meter						
Others	Indoor use, Ethernet, meeting ANSI/TIA-568-C.2 Enhanced Category5 (Bandwidth: 500 MHz)						
Physical Characteristics							
Conductor	Material	Annealed copper					
	Outside dia.	0.02 in. (0.51 mm)					
	Stranding	Solid					
Insulation	Material	Polyolefin					
	Nominal thickness	0.009 in. (0.245 mm)					
	Outside dia.	0.039 in. (1.0 mm)					
	Insulation color	Blue/White (Blue), Orange/White (Orange) Green/White (Green), Brown/White (Brown)					
Twisted pair	Four (4) Unshielded twisted pairs (8 in total)						
Barrier layer	Plastic tape lap winding						
Double shielding	Shielding 1	Double-faced aluminum foil polyester tape lap winding					
	Shielding 2	Tinned annealed copper wire braid (Density: 90% or more)					
Sheath	Material	Lead-free • Heat-resistant PVC					
	Nominal thickness	0.021 in. (0.55 mm)					
	Color	Black					
Outside dia.	0.259 in. (6.6 mm)						
Frame resistance	UL1581 VW-1						
Weight	About 28.7 lbs. (13.0 kg)/656 ft. (200 m)						
Mechanical Characteristics							
Maximum recommended pulling tension	110 N						
Minimum bend radius	1.2 in. (30 mm)						
Electrical Characteristics							
Conductor resistance	93.8 Ω/Km or less (68°F (20°C))						
Insulation resistance	2,500 MΩ · km or more						
Dielectric strength AC	500 V · min.						
Characteristic impedance	100 ±15 Ω (1 MHz to 500 MHz)						
Capacitance	56.0 nF/km or less (1 kHz)						
Transmission Characteristics							328 ft. (100 m)
Frequency (MHz)	Insertion Loss : IL@20C (dB/100 m)	Near End Crosstalk Loss : NEXT (dB)	Power Sum NEXT: PSNEXT (dB)	ACR to FEXT Ratio: ACRF (dB/100 m)	Power Sum ACRF: PSACRF (dB/100 m)	Return Loss: RL (dB)	Propagation Delay: DELAY (ns/100 m)
0.772	1.8	81.7	79.7	77.4	74.9	—	—
1	2.0	79.3	77.8	77.2	73.3	33.5	531
4	3.8	72.1	68.9	64.5	62.0	36.0	512
8	5.3	61.2	60.0	58.6	56.2	30.0	507
10	5.9	69.2	61.2	56.7	54.2	30.5	506
16	7.5	59.9	59.1	52.7	50.3	33.9	504
20	8.4	54.8	53.2	50.8	48.4	31.4	503
25	9.3	50.3	49.9	48.9	46.5	32.8	502
31.25	10.4	56.2	55.4	47.1	44.6	32.7	501
62.5	14.7	44.0	43.6	42.5	39.9	31.7	499
100	18.5	52.3	49.7	40.6	37.6	31.0	498
200*	26.5	50.8	43.0	32.7	30.9	29.0	497
250*	29.8	43.0	39.7	31.8	28.4	26.3	497
300*	32.9	37.3	36.4	28.1	27.7	22.1	497
400*	38.4	38.2	35.2	29.1	25.0	24.7	497
500*	43.0	33.7	31.5	30.8	27.4	25.7	496
Propagation Delay Skew: SKEW		Maximum: 21.2 ns/100 m, Minimum: 19.9 ns/100 m					



Insulation colors
1. Blue/White (Blue), 2. Orange/White (Orange)
3. Green/White (Green), 4. Brown/White (Brown)

Ordering code	Description
HDC-C5E-xx	Cable without connectors The length can be specified from 1 m to 200 m by the meter. (e.g. HDC-C5E-08: The length is 8 m HDC-C5E-123: The length is 123 m)
HDC-C5E-xxA	Cable with connectors (Both ends) The length can be specified from 1 m to 150 m by the meter. (e.g. HDC-C5E-08A: Both ends, 8 m HDC-C5E-123A: Both ends, 123 m)
HDC-C5E-xxB	Cable with connectors (One end) The length can be specified from 1 m to 200 m by the meter. (e.g. HDC-C5E-08B: One end, 8 m HDC-C5E-123B: One end, 123 m)
HDC-C5E-CNT-20	Parts for attaching connectors 20 RJ-45 connectors, covers, and stickers per set Shielded RJ-45 connectors, connector covers (Black), and stickers of 0.3 in. (8 mm)-aluminum foil tape for braid We recommend the use of these parts to maximize the performance of the CAT.5E HDC cable. Please contact us for details.