

Cat 6 & 5e Outdoor

Copper

HITACHI Inspire the Next

Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- Suitable for direct burial, lashed aerial, duct and underground conduit applications.
- Cable core is filled with non-conductive, water-blocking gel.
- Rugged black polyolefin jacket.
- UV resistant jacket.
- Supports up to 80 watts of power.

Packaging

- 1,000 foot (305m) reels

Applications

- Including:

HDBase-T A & B (Cat 6)
 5 Gigabit Ethernet (IEEE 802.3bz) (Cat 6)
 2.5 Gigabit Ethernet (IEEE 802.3bz)
 Gigabit Ethernet (IEEE 802.3ab)
 100 Mbps Ethernet (IEEE 802.3u)
 1000 Mbps ATM
 622 Mbps ATM
 15W PoE (IEEE 802.3af)
 30W PoE+ (IEEE 802.3at)
 60W PoE++ (IEEE 802.3bt Type 3)
 100W PoE++ (IEEE 802.3bt Type 4)

Temp Range

- Storage Temperature
-40C to +70C (-40F to +158F)
- Installation Temperature
-20C to +70C (-4F to +158F)
- Operation Temperature
-40C to +70C (-40F to +158F)

Category 6 and Category 5e Outdoor

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D. in.	CABLE mm	WEIGHT lbs/1000ft	kg/305m
Category 5e					
30145-8-XXY	4	0.23	5.8	25.75	11.68
Category 6					
30180-8-XXY	4	0.270	6.858	34.65	15.72

Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30145	8	XX	Y

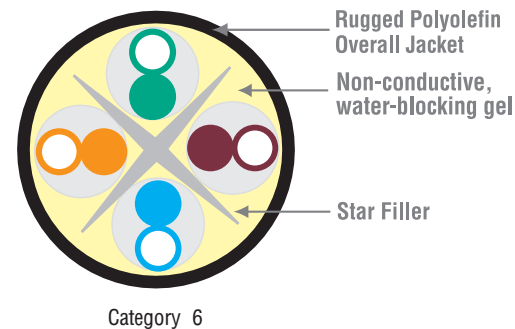
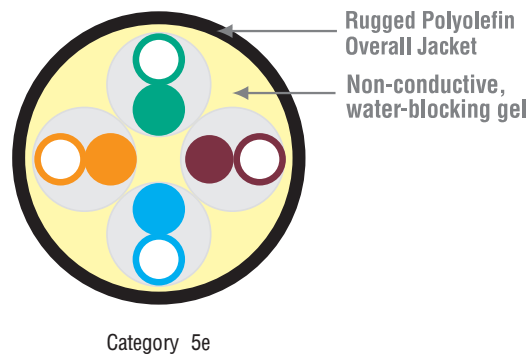
Jacket Colors (XX):

Black(BK)

Reel Type (Y):

Reels(3)

Features



DIELECTRIC MATERIALS	OUTDOOR UTP CABLES
Primary Insulation	Polyolefin
Overall Jacket	Medium density polyolefin

Hitachi Cable America reserves the right to revise any specifications.

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Electrical Characteristics

Input impedance	100 ± 15 Ω (1.0 to 100 MHz)	Maximum capacitance unbalance	330 pF/100 meters
	100 ± 20 Ω (101 to 250 MHz)	Maximum delay skew	45 ns/100 meters
Maximum resistance unbalance	5%	Nominal velocity of propagation (NVP)	63%
Voltage Rating	300 Volts	Ampacity ¹	.4 Amps/conductor

Transmission Specifications

ANSI/TIA 568-C.2 Category 5e Compliant

ISO/IEC 11801, 2nd ed. Class D Compliant

Freq. (MHz)	Ins. Loss		NEXT		PSNEXT		ACR		PSACR		ACRF		PSACRF		Return Loss	
	Std.	Max.	Std.	Min.	Std.	Min.	Cal.	Min.	Cal.	Min.	Std.	Min.	Std.	Min.	Std.	Min.
1	2.0	2.0	65.3	65.3	62.3	62.3	63.3	63.3	60.3	60.3	63.8	63.8	60.8	60.8	20.0	20.0
4	4.1	4.1	56.3	56.3	53.3	53.3	52.2	52.2	49.2	49.2	51.8	51.8	48.8	48.8	23.0	23.0
8	5.8	5.8	51.8	51.8	48.8	48.8	46.0	46.0	43.0	43.0	45.7	45.7	42.7	42.7	24.5	24.5
10	6.5	6.5	50.3	50.3	47.3	47.3	43.8	43.8	40.8	40.8	43.8	43.8	40.8	40.8	25.0	25.0
16	8.2	8.2	47.2	47.2	44.2	44.2	39.0	39.0	36.0	36.0	39.7	39.7	36.7	36.7	25.0	25.0
31.25	11.7	11.7	42.9	42.9	39.9	39.9	31.2	31.2	28.2	28.2	33.9	33.9	30.9	30.9	23.6	23.6
62.5	17.0	17.0	38.4	38.4	35.4	35.4	21.4	21.4	18.4	18.4	27.9	27.9	24.9	24.9	21.5	21.5
100	22.0	22.0	35.3	35.3	32.3	32.3	13.3	13.3	10.3	10.3	23.8	23.8	20.8	20.8	20.1	20.1
155*	-	28.1	-	32.4	-	29.4	4.4	4.4	1.4	1.4	-	20.0	-	17.0	-	18.8
200*	-	32.4	-	30.8	-	27.8	-	-	-	-	-	17.8	-	14.8	-	18.0
250*	-	36.9	-	29.3	-	26.3	-	-	-	-	-	15.8	-	12.8	-	17.3
400*	-	48.5	-	26.3	-	23.3	-	-	-	-	-	11.8	-	8.8	-	15.9

Transmission Specifications

ANSI/TIA 568-C.2 Category 6 Compliant

ISO/IEC 11801, 2nd ed. Class E Compliant

Freq. (MHz)	Ins. Loss		NEXT		PSNEXT		ACR		PSACR		ACRF		PSACRF		Return Loss	
	Std.	Max.	Std.	Min.	Std.	Min.	Cal.	Min.	Cal.	Min.	Std.	Min.	Std.	Min.	Std.	Min.
1	2.0	2.0	74.3	74.3	72.3	72.3	72.3	72.3	70.3	70.3	67.8	67.8	64.8	64.8	20.0	20.0
4	3.8	3.8	65.3	65.3	63.3	63.3	61.5	61.5	59.5	59.5	55.8	55.8	52.8	52.8	23.0	23.0
8	5.3	5.3	60.8	60.8	58.8	58.8	55.4	55.4	53.4	53.4	49.7	49.7	46.7	46.7	24.5	24.5
10	6.0	6.0	59.3	59.3	57.3	57.3	53.3	53.3	51.3	51.3	47.8	47.8	44.8	44.8	25.0	25.0
16	7.6	7.6	56.2	56.2	54.2	54.2	48.7	48.7	46.7	46.7	43.7	43.7	40.7	40.7	25.0	25.0
31.25	10.7	10.7	51.9	51.9	49.9	49.9	41.2	41.2	39.2	39.2	37.9	37.9	34.9	34.9	23.6	23.6
62.5	15.4	15.4	47.4	47.4	45.4	45.4	32.0	32.0	30.0	30.0	31.9	31.9	28.9	28.9	21.5	21.5
100	19.8	19.8	44.3	44.3	42.3	42.3	24.5	24.5	22.5	22.5	27.8	27.8	24.8	24.8	20.1	20.1
155	25.2	25.2	41.1	41.1	39.4	39.4	16.3	16.3	14.3	14.3	24.0	24.0	21.0	21.0	18.8	18.8
200	29.0	29.0	39.8	39.8	37.8	37.8	10.8	10.8	8.8	8.8	21.8	21.8	18.8	18.8	18.0	18.0
250	32.8	32.8	38.3	38.3	36.3	36.3	5.5	5.5	3.5	3.5	19.8	19.8	16.8	16.8	17.3	17.3
350*	-	39.8	-	36.1	-	34.1	-	-	-	-	-	16.9	-	13.9	-	16.3
555*	-	52.0	-	33.1	-	31.1	-	-	-	-	-	12.9	-	9.9	-	14.9
660*	-	57.7	-	32.0	-	30.0	-	-	-	-	-	11.4	-	8.4	-	14.4

*Frequencies beyond the TIA and ISO requirements are for information only.
All values are dB/100m.

1. Ampacity rating per NEC 725.144 of NFPA NEC (2017) up to 192 cable bundle.

