

Cat 6A Outdoor

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.
- Proven shield technology improves RFI and EMI performance.

Packaging

- 1,000 foot (305m) reels

Applications

- Including:
 - 10 Gigabit Ethernet (IEEE 802.an)
 - 5 Gigabit Ethernet (IEEE 802.3bz)
 - 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
-40°C to +70°C (-40°F to +158°F)
- Installation Temperature
-20°C to +70°C (-4°F to +158°F)
- Operation Temperature
-40°C to +70°C (-40°F to +158°F)

Category 6A F/UTP Outdoor

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D. in.	CABLE mm	WEIGHT lbs/1000ft	kg/305m
Category 6					
30287-8-XXY	4	0.360	9.144	56.87	25.8

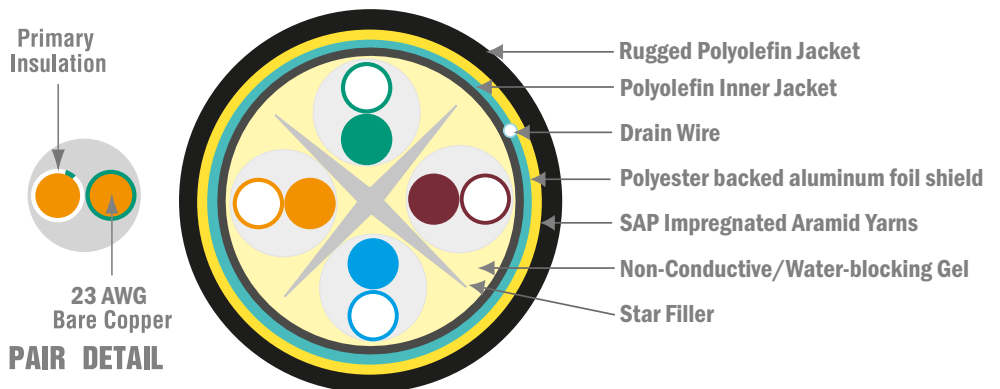
Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30287	8	XX	Y

Jacket Colors (XX):
Black(BK)

Reel Type (Y):
Reels(3)

Features



DIELECTRIC MATERIALS	OUTDOOR F/UTP CABLES
Primary Insulation	Polyolefin and/or Fluoropolymer
Overall Jacket	Medium density polyolefin

Hitachi Cable America reserves the right to revise any specifications.

Special Applications Outdoor Cable

Copper

Electrical Characteristics

Input impedance	100+/-15 Ω (1.0-100 MHz)
	100+/-20 Ω (101-250 MHz)
	100+/-25 Ω (251-500 MHz)
Maximum Conductor Resistance:	9.38 Ω /100 Meters @ 20C
Maximum Resistance Unbalance:	3%
Maximum Mutual Capacitance:	5.6 nF/100 Meters @ 1 kHz
Maximum Capacitance Unbalance:	330 pF/100 Meters
Maximum Delay Skew:	45 ns/100 Meters
Nominal Velocity of Propogation:	67%

Cable Ampacity Chart							
Bundle Size	1	2-7	8-19	20-37	38-61	62-91	92-192
Cable Temp	60°C	60°C	60°C	60°C	60°C	60°C	60°C
23 AWG	2.5	1.2	0.8	0.6	0.5	0.5	0.4

The table above is derived from the one approved by the National Fire Protection Agency and used in the National Electrical Code, NFPA-70. The complete table can be found in sections 725.144 and 800 Communication Circuits of the code. The table identifies the ampacity of each conductor (in amperes) in a 4-pair Class 2 or Class 3 data cable. Ambient temperature used for development of the table is 30°C (86° F) with all conductors in all cables carrying current. The table is based on 60°C (140°F), 75°C (167°F) and 90°C (194°F) rated cables. All cable temps are operational temp ratings. Cables with temp ratings above 90c would deliver additional power handling capacity.

Transmission Specifications

ANSI/TIA-568.2-D Category 6A Compliant

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

Frequency (MHz)	Insertion Loss Max. (dB / 100 m)	NEXT Loss Min. (dB / 100 m)		ACR Min. (dB / 100 m)		ACRF Min. (dB / 100 m)		Return Loss Min. (dB / 100 m)	Delay Max. (ns / 100 m)
		WP	PS	WP	PS	WP	PS		
1	2.1	74.3	72.3	72.2	70.2	67.8	64.8	20.0	599
4	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0	580
8	5.3	60.8	58.8	55.4	53.4	49.7	46.7	24.5	574
10	5.9	59.3	57.3	53.4	51.4	47.8	44.8	25.0	573
16	7.5	56.2	54.2	48.8	46.8	43.7	40.7	25.0	570
20	8.4	54.8	52.8	46.4	44.4	41.8	38.8	25.0	569
25	9.4	53.3	51.3	44.0	42.0	39.8	36.8	24.3	568
31.25	10.5	51.9	49.9	41.4	39.4	37.9	34.9	23.6	567
62.5	15.0	47.4	45.4	32.4	30.4	31.9	28.9	21.5	565
100	19.1	44.3	42.3	25.2	23.2	27.8	24.8	20.1	564
155	24.1	41.4	39.4	17.4	15.4	24.0	21.0	18.8	564
200	27.6	39.8	37.8	12.2	10.2	21.8	18.8	18.0	563
250	31.1	38.3	36.3	7.3	5.3	19.8	16.8	17.3	563
300	34.3	37.1	35.1	2.9	0.9	18.3	15.3	16.8	563
350	37.2	36.1	34.1	---	---	16.9	13.9	16.3	563
400	40.1	35.3	33.3	---	---	15.8	12.8	15.9	563
500	45.3	33.8	31.8	---	---	13.8	10.8	15.2	562
555*	47.9	33.1	31.1	---	---	12.9	9.9	14.9	562
660*	52.8	32.0	30.0	---	---	11.4	8.4	14.4	562

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

