

Cat 6 XS™

HITACHI Inspire the Next

Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- UL Verified TIA-568-D.2.
- Low Smoke Plenum construction.
- Guaranteed minimum performance.
- Tested from 1 to 555 MHz.
- No internal pair separator.
- Small outside diameter permits more cables per conduit than typical Category 6 cable.
- Standard Reelex package made with 100% post consumer materials.
- CMR-LSHF version offers a halogen free design for improved environmental performance.

Packaging

- 1,000 foot (305m) reels, Reelex.
- Reverse sequential footage markings standard on a 1,000 packages.

Options

- 23 AWG Conductors available

Applications

- Including:
 - 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 +60°C (-40°F to +140°F)
- Installation Temperature
0°C to +60°C (+32°F to +140°F)
- Operation Temperature
 - Plenum
-20°C to +90°C (-4°F to +194°F)
 - Riser/Low Smoke Halogen Free
-20°C to +75°C (-4°F to +167°F)

XS™ UTP (Plenum)

c(UL)us Listed Type CMP (UL 910), CSA Type FT6

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D. in.	mm	CABLE WEIGHT lbs/1000ft	kg/305m
30237-8-XXY	4	.20	5.08	25.24	11.45

XS™ UTP (Riser)

c(UL)us Listed Type CMR (UL 1666), CSA Type FT4

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D. in.	mm	CABLE WEIGHT lbs/1000ft	kg/305m
30238-8-XXY	4	.21	5.48	23.12	10.5

XS™ UTP (Riser-Low Smoke Halogen Free)

c(UL)us Listed Type CMR-LSHF (UL 1666 & IEC 62821), CSA Type FT4

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D. in.	mm	CABLE WEIGHT lbs/1000ft	kg/305m
30309-8-XXY	4	.21	5.26	23.12	10.5

Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30237	8	XX	Y

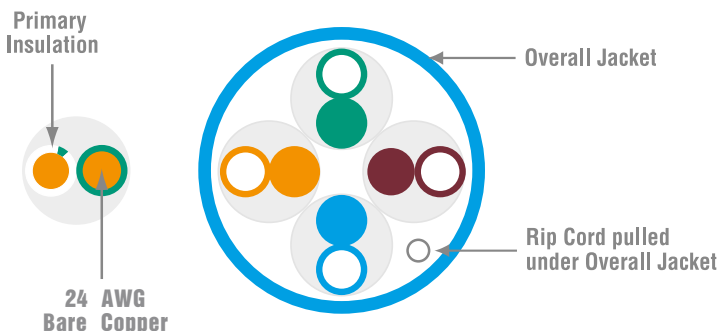
Jacket Colors (XX):

Black(BK); Blue(BL); Brown(BR); Gray(GA); Green(GR); Red(RD); White(WH); Yellow(YE)

Reel Type (Y):

Reelex Boxes(2); Reels(3)

Features



PAIR DETAIL

DIELECTRIC MATERIALS	RISER	PLENUM	LSHF
Primary Insulation	Polyolefin	Plenum-rated Fluoropolymer	Polyethylene
Overall Jacket	Flame-retardant Thermoplastic	Flame-retardant Thermoplastic	Zero-Halogen Flame-retardant Thermoplastic

Hitachi Cable America reserves the right to revise any specifications.

UTP Category 6

Copper

Electrical Characteristics

Input Impedance	100 ± 15Ω (1.0 to 100 MHz) 100 ± 20Ω (101 to 250 MHz)
Maximum resistance unbalance	5%
Maximum capacitance unbalance	330 pF/100 meters
Maximum delay skew	45 ns/100 meters
Nominal velocity of propagation (NVP)	riser, 68% plenum, 70%
Voltage Rating	300 Volts

Bundle Size	1		2-7		8-19		20-37		38-61		62-91		92-192	
	75°C	90°C	75°C	90°C	75°C	90°C	75°C	90°C	75°C	90°C	75°C	90°C	75°C	90°C
24 AWG	2.0	2.0	1.4	1.6	1.0	1.1	0.7	0.9	0.6	0.7	0.5	0.6	0.4	0.5

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.

Photo is for representation purposes only.

Transmission Specifications

ANSI/TIA-568.2-D Category 6 Verified
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
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
300*	-	36.4	-	37.1	-	35.1	-	-	-	-	-	18.3	-	15.3	-	16.8
350*	-	39.8	-	36.1	-	34.1	-	-	-	-	-	16.9	-	13.9	-	16.3
400*	-	43.0	-	35.3	-	33.3	-	-	-	-	-	15.8	-	12.8	-	15.9
500*	-	48.9	-	33.8	-	31.8	-	-	-	-	-	13.8	-	10.8	-	15.2
555*	-	52.0	-	33.1	-	31.1	-	-	-	-	-	12.9	-	9.9	-	14.9

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