

# Supra 10G-XE™

Copper

## HITACHI Inspire the Next

### Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- UL Verified TIA-568-C.2.
- Low Smoke Plenum construction.
- Tested from 1 to 660 MHz.
- Small O.D. allows more cables per conduit.
- Noise Control Barrier (NCB™) technology allows for a reduced outside diameter and electrical performance that is superior to discontinuous shield designs.
- UL Tested (LP) for maximum power support.
- Supports up to 120 watts for Power Over Ethernet (PoE).

### Packaging

- 1,000 foot (305m) reels

### Options

- Available in LSZH

### Applications

- Including:
  - HDBase-T A & B
  - 10 Gigabit Ethernet (IEEE 802.3an)
  - 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
  - 40C to +60C (-40F to +140F)
- Installation Temperature
  - 0C to +60C (+32F to +140F)
- Operation Temperature
  - 20C to +75C (-4F to +167F)

## Category 6A (Plenum)

(cUL)us Listed Type CMP, CSA Type FT6)

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT lbs/1000ft	kg/305m
		in.	mm		
30303-8-XXY	4	.275	6.985	40.34	18.29

## Category 6A (Riser)

(cUL)us Listed Type CMR, CSA Type FT4)

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT lbs/1000ft	kg/305m
		in.	mm		
30304-8-XXY	4	.275	6.985	39.02	17.70

### Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30303	8	XX	Y

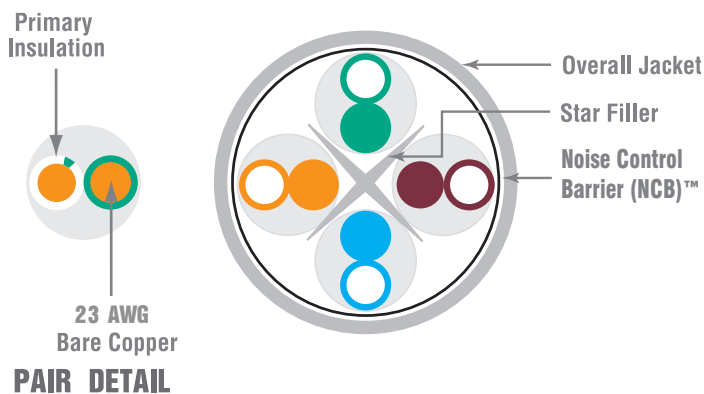
Jacket Colors (XX):

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

Reel Type (Y):

Reels(3)

## Features



DIELECTRIC MATERIALS	RISER	PLENUM
Primary Insulation	Polyolefin	Plenum-rated fluoropolymer
Overall Jacket	Flame-retardant thermoplastic	Low-smoke, flame-retardant thermoplastic
Star Filler	Flame-retardant thermoplastic	Plenum-rated polymer

Hitachi Cable America reserves the right to revise any specifications.

## Electrical Characteristics

Input impedance	100 ± 15Ω (1.0 to 100 MHz) 100 ± 20Ω (100 to 250 MHz) 100 ± 25Ω (251 to 500 MHz)
Maximum resistance unbalance	3%
Maximum capacitance unbalance	330 pF/100 meters
Maximum delay skew	45 ns/100 meters
Nominal velocity of propagation (NVP)	68%, riser 70%, plenum
Voltage Rating	300 Volts
LP Rating (UL)	.6 Amps/conductor



## Transmission Specifications

ANSI/TIA 568-C.2 Category 6A Verified

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

	Ins. Loss	NEXT	PSNEXT	ACR	PSACR	ACRF	PSACRF	Return Loss	PSANEXT	PSANEXT	PSAACRF	PSAACRF
Freq. (MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	TIA Std.	Min	TIA Std.	Min
1	2.1	74.3	72.3	72.2	70.2	67.8	64.8	20.0	67.0	73.0	67.0	73.0
4	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0	67.0	73.0	66.2	72.2
8	5.3	60.8	58.8	55.4	53.4	49.7	46.7	24.5	67.0	73.0	60.1	66.1
10	5.9	59.3	57.3	53.4	51.4	47.8	44.8	25.0	67.0	73.0	58.2	64.2
16	7.5	56.2	54.2	48.8	46.8	43.7	40.7	25.0	67.0	73.0	54.1	60.1
20	8.4	54.8	52.8	46.4	44.4	41.8	38.8	25.0	67.0	73.0	52.2	58.2
25	9.4	53.3	51.3	44.0	42.0	39.8	36.8	2.3	67.0	73.0	50.2	56.2
31.25	10.5	51.9	49.9	41.4	39.4	37.9	34.9	23.6	67.0	73.0	48.3	54.3
62.5	15.0	47.4	45.4	32.4	30.4	31.9	28.9	21.5	65.6	71.6	42.3	48.3
100	19.1	44.3	42.3	25.2	23.2	27.8	24.8	20.1	62.5	68.5	38.2	44.2
155	24.1	41.4	39.4	17.4	15.4	24.0	21.0	18.8	59.6	65.6	34.4	40.4
200	27.6	39.8	37.8	12.2	10.2	21.8	18.8	18.0	58.0	64.0	32.2	38.2
250	31.1	38.3	36.3	7.3	5.3	19.8	16.8	17.3	56.5	62.5	30.2	36.2
300	34.3	37.1	35.1	2.9	0.9	18.3	15.3	16.8	55.3	61.3	28.7	34.7
350	37.2	36.1	34.1	-	-	16.9	13.9	16.3	54.3	60.3	27.3	33.3
400	40.1	35.3	33.3	-	-	15.8	12.8	15.9	53.5	59.3	26.2	32.2
500	45.3	33.8	31.8	-	-	13.8	10.8	15.2	52.0	58.0	24.2	30.2
555*	47.9	33.1	31.1	-	-	12.9	9.9	14.9	51.3	57.3	23.3	29.3
660*	52.8	32.0	30.0	-	-	11.4	8.4	14.4	50.2	56.2	21.8	27.8

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