

Indoor

Enhanced F/UTP

Copper

Product Highlights

- REACH & RoHS 2 compliant
- Made in U.S.A.
- UL Verified
- Low Smoke Plenum construction.
- Tested from 1 to 660 MHz
- Small O.D. allows more cables per conduit
- Proven shield technology improves RFI, EMI and alien crosstalk performance

Packaging

- 1,000 foot (305 m) reels
- Reverse sequential footage markings standard on each 1,000 foot package
- Unit/pallet: 12
CMP Carton Weight (lbs): 43.64
CMP Product Weight (lbs): 40.34
*weight may vary, call for CMR information

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
-40°C to +60°C
(-40°F to +140°F)
- Installation Temperature
0°C to +60°C
(+32°F to +140°F)
- Operation Temperature
-20°C to +75°C
(-4°F to +167°F)

Supra 10G 6A F/UTP (Plenum)

c(UL)us Listed Type CMP (NFPA 262), CSA Type FT6

PART #	# OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT	
		inches	mm	lbs/1000 ft	kg/305 m
30233-8-XXY	4	0.275	6.98	40.34	18.29

Supra 10G 6A F/UTP (Riser-Low Smoke Zero Halogen)

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

PART #	# OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT	
		inches	mm	lbs/1000 ft	kg/305 m
30234-8-XXY	4	0.28	7.11	39.02	17.70

Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30233	8	XX	Y

Jacket Colors (XX):

Black (BK); Blue (BL); Brown (BR); Gray (GA); Green (GR); Red (RD); White (WH); Yellow (YE) Reels (3)

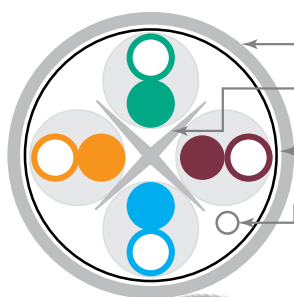
Reel Type (Y):

Features

Primary
Insulation



23 AWG
Bare Copper
PAIR DETAIL



Overall Jacket

Star Filler

Polyester Backed
Aluminum Foil Shield

Drain Wire

DIELECTRIC MATERIALS

PLENUM

Primary Insulation: Plenum-rated fluoropolymer
Overall Jacket: Low-smoke, Flame-retardant Thermoplastic
Star Filler: Plenum-rated polymer

RISER

Primary Insulation: Polyolefin
Overall Jacket: Flame-retardant Thermoplastic
Star Filler: Flame-retardant Thermoplastic

Hitachi Cable America reserves the right to revise any specifications.

Cat 6A Supra 10G™ F/UTP

Transmission Specifications

ANSI/TIA-568.2-D 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	24.3	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	39.3	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.

Photo is for representation purposes only.



Copper

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):	70%, Plenum 68%, Riser
Voltage Rating:	300 Volts
LP Rating (UL) - CMP	0.6 Amps/conductor

Cable Ampacity Chart														
Bundle Size	1		2-7		8-19		20-37		38-61		62-91		92-192	
Cable Temp	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
23 AWG	2.5	2.5	1.5	1.7	1.1	1.7	0.8	0.9	0.7	0.8	0.7	0.8	0.5	0.6
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.														

Indoor

Enhanced F/UTP

Copper

Product Highlights

- REACH & RoHS 2 compliant
- Made in U.S.A.
- UL Verified
- Low Smoke Plenum construction.
- Tested from 1 to 660 MHz
- Small O.D. allows more cables per conduit
- Proven shield technology improves RFI, EMI and alien crosstalk performance
- UL Tested (LP) for maximum power support

Packaging

- 1,000 foot (305 m) reels
- Reverse sequential footage markings standard on each 1,000 foot package
- Unit/pallet: 12
CMP Carton Weight (lbs): 43.64
CMP Product Weight (lbs): 40.34

*weight may vary, call for CMR information

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
-40°C to +60°C
(-40°F to +140°F)
- Installation Temperature
0°C to +60°C
(+32°F to +140°F)
- Operation Temperature
-20°C to +105°C
(-4°F to +221°F)

Supra 10G 6A F/UTP (Plenum)

c(UL)us Listed Type CMP (NFPA 262), CSA Type FT6

PART #	# OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT	
		inches	mm	lbs/1000 ft	kg/305 m
30233-8-XXY	4	0.275	6.98	40.34	18.29

Cable Print Legend

HITACHI CABLE AMERICA CATEGORY 6A SUPRA 10G F/UTP -
4PR/23 c(UL)us CMP-LP (0.6A) (105C) - CAT 6A

ANSI/TIA 568.2-D - Z/YYXY (XXXXX) - Mx - R# - NNNN FEET

WHERE: Z = MONTH OF MFG.

YY = YEAR OF MFG.

XXXXX = JOB NUMBER

x = RESPOOL MACHINE #

= MASTER REEL

NNNN = SEQUENTIAL FOOTAGE MARKERS

Building a Part Number

Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30327	8	XX	Y

Jacket Colors (XX):

Black (BK); Blue (BL); Brown (BR); Gray (GA); Green (GR); Red (RD); White (WH); Yellow (YE) Reels (3)

Reel Type (Y):

Black (BK); Blue (BL); Brown (BR); Gray (GA); Green (GR); Red (RD); White (WH); Yellow (YE) Reels (3)

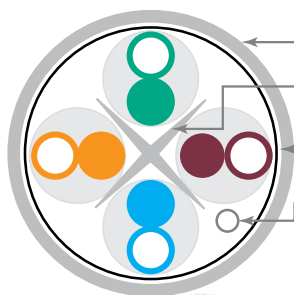
Features

Primary
Insulation



23 AWG
Bare Copper

PAIR DETAIL



Overall Jacket

Star Filler

Polyester Backed
Aluminum Foil Shield

24 AWG (7/32 stranded)
TC Drain Wire

DIELECTRIC MATERIALS

PLENUM

Primary Insulation: Plenum-rated fluoropolymer

Overall Jacket: Low-smoke, flame-retardant thermoplastic

Star Filler: Plenum-rated polymer

Hitachi Cable America reserves the right to revise any specifications.

Cat 6A Supra 10G™ F/UTP

Transmission Specifications

ANSI/TIA-568.2-D 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	24.3	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	39.3	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.

Photo is for representation purposes only.



Copper

Electrical Characteristics

Input Impedence:	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):	70%, Plenum
Voltage Rating:	300 Volts
LP Rating (UL) - CMP	0.6 Amps/conductor

Cable Ampacity Chart														
Bundle Size	1		2-7		8-19		20-37		38-61		62-91		92-192	
Cable Temp	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
23 AWG	2.5	2.5	1.5	1.7	1.1	1.7	0.8	0.9	0.7	0.8	0.7	0.8	0.5	0.6
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.														