

Indoor

F/UTP

Copper

Product Highlights

- REACH & RoHS 2 compliant
- Made in U.S.A.
- UL Verified
- Low Smoke Plenum construction
- Tested from 1 to 555 MHz
- Small O.D. allows more cables per conduit
- Proven shield technology improves RFI and EMI 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): 43.63
CMP Product Weight (lbs): 40.33
*weight may vary, call for CMR information

Applications

- Including:
 - 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)

Category 6 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
30154-8-XXY	4	0.275	6.98	40.33	18.29

Category 6 F/UTP (Riser)

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
30129-8-XXY	4	0.29	7.37	39.02	17.70

Building a Part Number

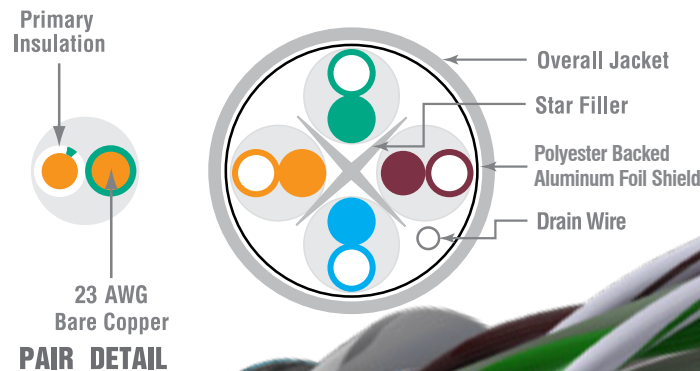
Base Part Number Ex.	No. of Conductors	Jacket Color	Reel Type
30154	8	XX	Y

Jacket Colors (XX):

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

Reel Type (Y):

Features



DIELECTRIC MATERIALS

PLENUM

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

RISER

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

Hitachi Cable America reserves the right to revise any specifications.

Cat 6 F/UTP

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				72.3			67.8	67.8	64.8	64.8	20.0	20.0
4	3.8	3.8		65.3				61.5			55.8	55.8	52.8	52.8	23.0	23.0
8	5.3	5.3		60.8				55.4			49.7	49.7	46.7	46.7	24.5	24.5
10	6.0	6.0		59.3				53.3			47.8	47.8	44.8	44.8	25.0	25.0
16	7.6	7.6		56.2				48.7			43.7	43.7	40.7	40.7	25.0	25.0
31.25				51.9				41.2			37.9	37.9	34.9	34.9	23.6	23.6
62.5				47.4				32.0			31.9	21.9	28.9	28.9	21.5	21.5
100				44.3				24.5			27.8	27.8	24.8	24.8	20.1	20.1
200				39.8				10.8	8.8	8.8	21.8	21.8	18.8	18.8	18.0	18.0
250				38.3			5.5	5.5	3.5	3.5	19.8	19.8		16.8	17.3	17.3
350*	-		-	36.1	-		-	-	-	-	-	16.9	-	13.9	-	16.3
555*	-		-	33.1	-		-	-	-	-	-	12.9	-	9.9	-	14.9
660*	-		-	32.0	-		-	-	-	-	-	11.4	-	8.4	-	14.4

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



Copper

Photo is for representation purposes only.



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:	5%
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

Cable Ampacity Chart							
Bundle Size	1	2-7	8-19	20-37	38-61	62-91	92-192
Cable Temp	75°C	75°C	75°C	75°C	75°C	75°C	75°C
23 AWG	2.5	1.5	1.1	0.8	0.7	0.7	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.