

Power Solutions to Support PoE Applications

Power+™ UTP

Category 5e Plus Power Performance

30310 Plenum

Designed to Power the Internet of Things

- Supports up to 140 watts.
- Exceeds limited power requirements of PoE standard IEEE 802.3bt
- Applications include cameras, access points, lighting, video and more.

LP (Limited Power) Tested

- Tested by Underwriters Laboratories (UL) for maximum power capacity.
- Highest temperature rating in the industry for a Category compliant PoE cable: 105°C.
- Ensures safe support of low voltage devices (<60v DC).

UL Verified electrical performance

- UL verified Category 5e TIA-568-C.2
- Cable Component tested to 400 MHz
- Supports all applications intended for Category 5e including Gigabit Ethernet.

22 AWG Construction

- Mitigates temperature rise associated with bundled PoE cables.
- Extends power delivery beyond 100 meters.
- 88% efficiency in delivering power to 100 meters.
- Minimal temperature rise reduces cooling requirements.

Made in U.S.A. at Manchester, NH facility



Cat 5e Power+™

UTP

Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- UL Verified.
- Low Smoke Plenum construction.
- Tested from 1 to 400 MHz.
- UL Tested (LP) for maximum power support.
- Specifically designed to accommodate higher power applications.
- Utilizes larger gauge copper (22 AWG).
- Supports up to 140 watts of power.

Packaging

- 1,000 foot (305m) reels
- 1,000 foot (305m) Reelex (featuring reverse sequential numbering)

Options

- CMP-50 rated cables available

Applications

- Including:
 - 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 +105C (-4F to +221F)

Category 5e (Plenum)

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

HITACHI PART NO.	NO. OF PAIRS	CALCULATED CABLE O.D.		CABLE WEIGHT	
		in.	mm	lbs/1000ft	kg/305m
30310-8-XXY	4	.225	5.71	20.36	9.24

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)



Electrical Characteristics

Input impedance	100 ± 15Ω (1.0 to 100 MHz)	Max resistance unbalance	3%
Voltage Rating	300 Volts	Max capacitance unbalance	330 pF/100 meters
LP Rating (UL)	.7 Amps/conductor	Max delay skew	45 ns/100 meters
		Nominal velocity of propagation (NVP)	68%, riser / 70%, plenum

Note: This is a 22 AWG cable with 105c rating. Its Ampacity performance exceeds the maxim listed in the Ampacity table found in NEC 725.144 of the current electrical code.

Features

DIELECTRIC MATERIALS

PLENUM

Primary Insulation

Plenum-rated fluoropolymer

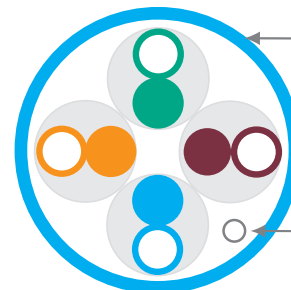
Overall Jacket

Low-smoke, flame-retardant thermoplastic

Primary Insulation



22 AWG Bare Copper PAIR DETAIL



Overall Jacket

Rip Cord pulled under Overall Jacket

Transmission Specifications

ANSI/TIA 568-C.2 Category 5e Verified

ISO/IEC 11801, 2nd ed. Class D 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	65.3	65.3	62.3	62.3	63.3	63.3	60.3	60.3	63.8	63.8	60.8	60.8	20.0	20.0
4	4.1	4.1	56.3	56.3	53.3	53.3	52.2	52.2	49.2	49.2	51.8	51.8	48.8	48.8	23.0	23.0
8	5.8	5.8	51.8	51.8	48.8	48.8	46.0	46.0	43.0	43.0	45.7	45.7	42.7	42.7	24.5	24.5
10	6.5	6.5	50.3	50.3	47.3	47.3	43.8	43.8	40.8	40.8	43.8	43.8	40.8	40.8	25.0	25.0
16	8.2	8.2	47.2	47.2	44.2	44.2	39.0	39.0	36.0	36.0	39.7	39.7	36.7	36.7	25.0	25.0
31.25	11.7	11.7	42.9	42.9	39.9	39.9	31.2	31.2	28.2	28.2	33.9	33.9	30.9	30.9	23.6	23.6
62.5	17.0	17.0	38.4	38.4	35.4	35.4	21.4	21.4	18.4	18.4	27.9	27.9	24.9	24.9	21.5	21.5
100	22.0	22.0	35.3	35.3	32.3	32.3	13.3	13.3	10.3	10.3	23.8	23.8	20.8	20.8	20.1	20.1
155*	-	28.1	-	32.4	-	29.4	4.4	4.4	1.4	1.4	-	20.0	-	17.0	-	18.8
200*	-	32.4	-	30.8	-	27.8	-	-	-	-	-	17.8	-	14.8	-	18.0
250*	-	36.9	-	29.3	-	26.3	-	-	-	-	-	15.8	-	12.8	-	17.3
400*	-	48.5	-	26.3	-	23.3	-	-	-	-	-	11.8	-	8.8	-	15.9

*Frequencies beyond the TIA and ISO requirements are for information only.

All values are dB/100m.

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