

Multi-Net™

Copper

HITACHI Inspire the Next

Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- Low Smoke Plenum construction.
- Bonded leg constructions facilitate easier cable pulls.
- Easy-tear web allows quick cable separation in the field.
- Supports up to 100 watts (Category 6) and 80 watts (Category 5e).

Packaging

- 1,000 foot (305m) reels

Options

- Custom leg configurations available
- 2-pair leg constructions 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)

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)

Multi-Net™ Bonded Jacket (Plenum)

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

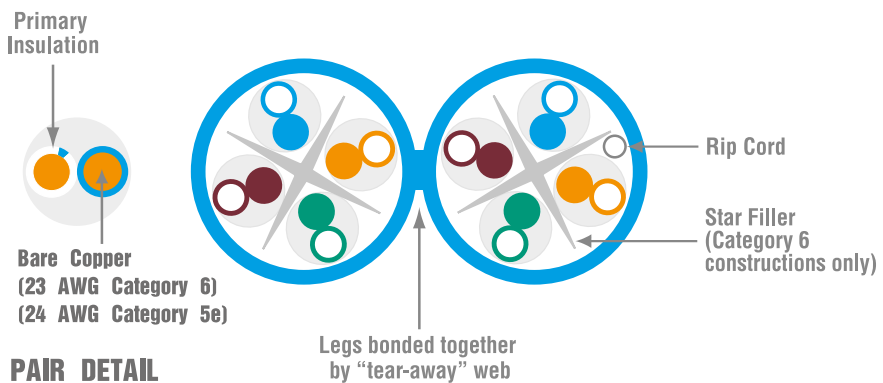
HITACHI PART NO.	CATEGORY OF EACH 4-PAIR UTP LEG	CALCULATED CABLE O.D. in.	mm	CABLE WEIGHT lbs/1000ft	kg/305m
TWO LEG CONSTRUCTIONS					
30120	6 x 6	.215 x .450	5.461 x 11.430	57.60	26.12
38730	5e x 5e	.180 x .380	4.572 x 9.652	41.67	18.90

Multi-Net™ Bonded Jacket (Riser)

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

HITACHI PART NO.	CATEGORY OF EACH 4-PAIR UTP LEG	CALCULATED CABLE O.D. in.	mm	CABLE WEIGHT lbs/1000ft	kg/305m
TWO LEG CONSTRUCTIONS					
30086	6 x 6	.25 x .52	6.4 x 13.2	50.0	22.7
38743	5e x 5e	.193 x .406	4.902 x 10.312	42.15	19.12

Features



Hitachi Cable America reserves the right to revise any specifications.



Diagram scale approx. 2:1

Electrical Characteristics

Input impedance	100 ± 15 Ω (1.0 to 100 MHz)	Maximum capacitance unbalance	330 pF/100 meters
	100 ± 20 Ω (101 to 250 MHz)	Maximum delay skew	45 ns/100 meters
Maximum resistance unbalance	5%	Nominal velocity of propagation (NVP)	63%
Voltage Rating	300 Volts	Ampacity ¹ (Category 5e)	.4 Amps/Conductor
		Ampacity ¹ (Category 6)	.5 Amps/Conductor

Transmission Specifications

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

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

Transmission Specifications

ANSI/TIA 568-C.2 Category 6 Compliant

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
155	25.2	25.2	41.1	41.1	39.4	39.4	16.3	16.3	14.3	14.3	24.0	24.0	21.0	21.0	18.8	18.8
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
350*	-	39.8	-	36.1	-	34.1	-	-	-	-	-	16.9	-	13.9	-	16.3
555*	-	52.0	-	33.1	-	31.1	-	-	-	-	-	12.9	-	9.9	-	14.9
660*	-	57.7	-	32.0	-	30.0	-	-	-	-	-	11.4	-	8.4	-	14.4

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

1. Ampacity rating per NEC 725.144 of NFPA NEC (2017) up to 192 cable bundle.

