

Cat 6 F/UTP

HITACHI Inspire the Next

Product Highlights

- REACH, RoHS & RoHS 2 compliant
- Made in USA
- Low Smoke CMP construction
- Tested from 1 to 555 MHz
- UL Verified Category 6
- Proven Shield Technology improves RFI and EMI performance

Packaging

- 1,000 foot (305m) reels

Applications

- Including:
 - HDBase-T
 - 10G BASE-T 10 Gigabit Ethernet (limited distance)
 - 1000 BASE-T Gigabit Ethernet
 - 1000 Mbps ATM
 - 622 Mbps ATM
 - 100 BASE-T Ethernet
 - Broadband Video
 - POE
 - POE+

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 6 F/UTP (Plenum)

(cUL)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 |
| 30154-8-XXY | 4 | .28 | 7.11 | 40.33 | 18.29 |

Category 6 F/UTP (Riser)

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

| HITACHI PART NO. | NO. OF PAIRS | CALCULATED CABLE O.D. | | CABLE WEIGHT | |
|------------------|--------------|-----------------------|------|--------------|---------|
| | | in. | mm | lbs/1000ft | kg/305m |
| 30129-8-XXY | 4 | .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 |

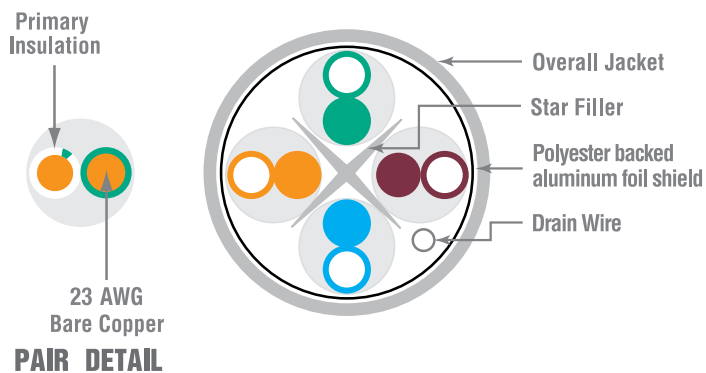
Jacket Colors (XX):

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

Reel Type (Y):

Reels(3)

Features



| DIELECTRIC MATERIALS | RISER | PLENUM |
|----------------------|-------------------------------|--|
| Primary Insulation | Flame-retardant thermoplastic | 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 (101 to 250 MHz) |
| Maximum resistance unbalance | 5% |
| 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 |



Photo is for representation purposes only.

Transmission Specifications

ANSI/TIA 568-C.2 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 | 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 | 21.9 | 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 |
| 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.