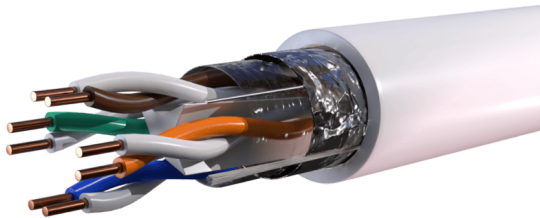




# Nova 10G Cat 6a, 4-Pair, U/UTP Cable CMP, AWG 23



## Applicable Standards

- **ANSI/TIA-568.2-D** (Category 6A performance)
- **ISO/IEC 11801 Class EA**
- **EN 50173-1** and **EN 50288-10-1**
- **IEEE 802.3an** (10GBASE-T)
- **UL 444** (CMR Flame Rating)
- **IEC 60332-1-2** (Flame Retardant)
- **RoHS Directive** 2011/65/EU & REACH Compliant

## Product Part Number

N018.FU1KCRBU

## Product Description

The **Nova 10G Shielded Category 6A F/UTP Cable** is engineered to support **10 Gigabit Ethernet (10GBASE-T)** applications over distances up to 100 meters. Designed with **Foil Shielding (F/UTP)** to mitigate alien crosstalk and external interference, this cable ensures superior signal integrity in high-density and electrically noisy environments such as data centers and enterprise networks. Constructed with **23 AWG solid bare copper conductors**, a CMR-rated flame-retardant jacket, and internal separator, the cable delivers reliable high-performance transmission for structured cabling systems.

## Product Features

- **10G Performance** : Supports 10 Gigabit Ethernet (10GBASE-T) up to 100m with minimal signal loss
- **F/UTP construction** : Overall foil shield for enhanced EMI/RFI protection
- **23 AWG solid bare copper conductors** for low insertion loss
- **Internal cross-web separator** to maintain pair geometry and reduce crosstalk
- **CMR (Riser)-rated jacket** suitable for vertical runs in building risers
- **Excellent NEXT, PS-NEXT, ACR-F, and Return Loss** characteristics
- **RoHS Compliant** : Meets industry standards for safety, reducing harmful substances for a greener, more sustainable product.
- **Meter marked** for easy length verification during installation





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## Applications

- 10 Gigabit Ethernet (10GBASE-T) up to 100m
- 5 Gigabit and 2.5 Gigabit Ethernet (5G/2.5GBASE-T)
- Gigabit Ethernet (1000BASE-T) and Fast Ethernet (100BASE-TX)
- Power over Ethernet (PoE, PoE+, PoE++) – IEEE 802.3af/at/bt
- High-Speed Data Centers and Enterprise Networks
- VoIP (Voice over IP) and Video Conferencing
- HD and 4K Video Streaming over IP
- Building Automation and Intelligent Lighting Systems
- Wireless Access Points (Wi-Fi 6, Wi-Fi 6E, and future generations)
- Security and Surveillance Systems (IP CCTV Cameras)
- Industrial and Smart Building Applications



## Material Specifications

Conductor	Material	AWG23 Solid Bare Copper
	Nominal OD (mm)	0.565 ± 0.01
Insulation	Material	PE
	Diameter (mm)	1.10 ± 0.08
	Color Coded Pairs	Blue / White with Blue stripe
		Orange / White with Orange stripe
		Green / White with Green stripe
Separator		Brown / White with Brown stripe
	Material	FRPE
	Screening Material	Mylar + Al/Mylar
	Rip cord	Yes
	Drain Wire	Yes
Jacket	Material	Polyvinyl chloride (PVC) - RoHS Compliant, CMR
	Outer Diameter (mm)	7.4 ± 0.5
	Thickness (mm)	0.55 ± 0.05
	Color	Blue / White / Black / Green / Grey / Yellow / Red

## Environmental Specifications

Temperature range	Storage & Shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 75°C



## Physical & Electrical Characteristics (at 20°C)

Cable Cold Bend	-20 ± 2°C for 4hr
Tensile Strength (Mpa) before Aging	≥ 13.5
Elongation(%) before Aging	≥ 150
Tensile Strength (Mpa) after Aging ( Aging Period = 100 for 24hr for 7days)	≥ 12.5
Elongation(%)after Aging ( Aging Period = 100 for 24hr for 7days)	≥ 125
Max. Cable Bend Radius	8 x Outer Diameter
Impedance(Ω) at 1.0 - 250.0 MHz	100 ± 15
Impedance(Ω) at 250.0 -500.0 MHz	100 ± 22
Max. DC Resistance (Ω/100m)	≤ 9.38
Max. DC Conductor Resistance Unbalance (%)	≤ 5
Delay Skew (ns/100m) at 1.0 - 550.0 MHz	≤ 45



## Transmission Performance

Frequency (MHz)	Attenuation  Max. dB/100m	NEXT  Min. dB/100m	PS.NEXT  Min. dB/100m	ACRF  Min. dB/100m	PS.ACRF  Min. dB/100m	RL  Min. dB/100m	Delay Skew  Max. ns/100m
1	3.0	65.0	62.0	64.2	61.2	19.1	45.00
4	3.5	64.1	61.8	52.1	49.1	21.0	45.00
8	5.0	59.4	57.0	46.1	43.1	21.0	45.00
10	5.5	57.8	55.5	44.2	41.2	21.0	45.00
16	7.0	54.6	52.2	40.1	37.1	20.0	45.00
20	7.9	53.1	50.7	38.2	35.2	19.5	45.00
25	8.9	51.5	49.1	36.2	33.2	19.0	45.00
31.25	10.0	50.0	47.5	34.3	31.3	18.5	45.00
62.5	14.4	45.1	42.7	28.3	25.3	16.0	45.00
100	18.6	41.8	39.3	24.2	21.2	14.0	45.00
200	27.4	36.9	34.3	18.2	15.2	11.0	45.00
250	31.1	35.3	32.7	16.2	13.2	10.0	45.00
400	38.4	29.9	27.1	12.1	9.1	8.0	45.00
500	43.8	26.7	23.8	10.2	7.2	8.0	45.00

Permanent Link Test : PASS for Link less than or equal to 90m



NORTHERN  
LINK

## Nova 10G Cat 6a, 4-Pair, U/UTP Cable CMP, AWG 23

### Ordering Information

N018.FU1KCRBU	Nova 10G Shielded Category 6a, 4-Pair, F/UTP Cable CMR, AWG 23, Blue
N018.FU1KCRWH	Nova 10G Shielded Category 6a, 4-Pair, F/UTP Cable CMR, AWG 23, White
N018.FU1KCRYW	Nova 10G Shielded Category 6a, 4-Pair, F/UTP Cable CMR, AWG 23, Yellow
N018.FU1KCRBK	Nova 10G Shielded Category 6a, 4-Pair, F/UTP Cable CMR, AWG 23, Black

### Shipping Information

Item	Dimension
Product	Length : 305m   1000ft

