

# Elite Cables

## Product Part Number

- TPM2404N70XX

## Product Description

- U/UTP, 24AWG stranded bare copper, CAT.6, CM

## Product Features

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 550 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

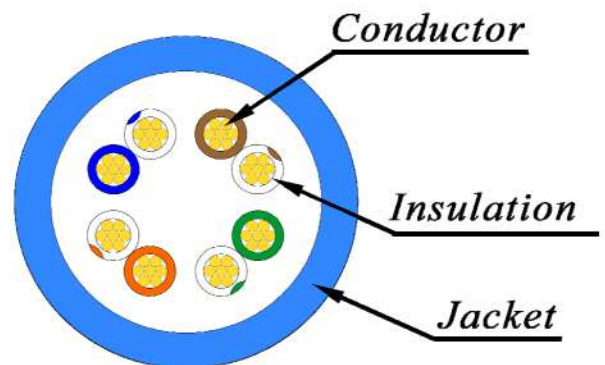
## Application

- Structure cabling for patch cable.
- Transmission of digital and analogue for data, video and audio applications.
- IEEE 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

## Applicable Standard

- Electrical Transmission
  - ANSI/TIA-568-C.2 (2009)
  - ISO/IEC 11801 (Edition 2.2)
  - IEC 61156-6 (Edition 3.1)
- Flame Test
  - UL 1685 (CM)
- Material and Construction
  - UL 444
  - CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)

## Sectional Drawing



# Elite Cables

## Material and Construction

Conductor	Material	24AWG stranded bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	0.95 ± 0.02 mm
		Orange & white/orange stripe	0.93 ± 0.02 mm
		Green & white/green stripe	0.95 ± 0.02 mm
Brown & white/brown stripe		0.93 ± 0.02 mm	
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	5.2 ± 0.2 mm	
	Thickness	0.50 ± 0.05 mm	
	Color	Per customer's request	
Marking	ELITE 1000X PATCH CABLE CAT 6 GIGASYSTEM---E142890 UTP 4PR 24AWG 75°C C(UL)US CM---ETL VERIFIED TO TIA-568-C. 2 mmyy <sup>1</sup> RoHS COMPLIANT XXXFT  Note 1: mmyy is date code.		

## Usage & Environmental Condition

Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius	≥ 4 times of overall diameter	
Maximum pulling tension	≤ 110 N	

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

Temperature rating	75°C
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ · km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

## Transmission Performance (at 20°C)

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.43	74.30	72.30	71.87	69.87	67.80	64.80	20.00	570.00	45.00
4	4.54	65.27	63.27	60.73	58.73	55.76	52.76	23.01	552.00	
8	6.38	60.75	58.75	54.37	52.37	49.74	46.74	24.52	546.73	
10	7.14	59.30	57.30	52.16	50.16	47.80	44.80	25.00	545.38	
16	9.06	56.24	54.24	47.17	45.17	43.72	40.72	25.00	543.00	
20	10.16	54.78	52.78	44.62	42.62	41.78	38.78	25.00	542.05	
25	11.41	53.33	51.33	41.92	39.92	39.84	36.84	24.17	541.20	
31.25	12.81	51.88	49.88	39.07	37.07	37.90	34.90	23.33	540.44	
62.5	18.46	47.36	45.36	28.90	26.90	31.88	28.88	20.74	538.55	
100	23.76	44.30	42.30	20.54	18.54	27.80	24.80	18.99	537.60	
150	29.65	41.66	39.66	12.01	10.01	24.28	21.28	17.47	536.94	
200	34.78	39.78	37.78	5.00	3.00	21.78	18.78	16.40	536.55	
250	39.42	38.33	36.33	N.A.	N.A.	19.84	16.84	15.57	536.28	
300	43.71	37.14	35.14	N.A.	N.A.	18.26	15.26	14.89	536.08	
350	47.74	36.14	34.14	N.A.	N.A.	16.92	13.92	14.31	535.92	
400	51.56	35.27	33.27	N.A.	N.A.	15.76	12.76	13.81	535.80	
450	55.22	34.50	32.50	N.A.	N.A.	14.74	11.74	13.37	535.70	
500	58.72	33.82	31.82	N.A.	N.A.	13.82	10.82	12.98	535.61	
550	62.11	33.19	31.19	N.A.	N.A.	12.99	9.99	12.62	535.54	

Values above 250MHz are for information only.