

# ABA Industry, Inc.

## Specification for Approval

### Product Part Number---TUP2404P03XX

U/UTP, 24AWG solid bare copper, CAT.5E, CMP, 350MHz

#### APPLICATION

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video, and audio applications.
- IEEE 802.3u 100BASE-T and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+) / IEEE 802.3bt (PoE++)

#### STANDARD COMPLIANCES

- ANSI/TIA-568.2-D (2018)
- ISO/IEC 11801-1
- IEC 61156-5 (Edition 2.1)
- NFPA 262 (CMP)
- UL 444
- CSA 22.2 NO.214
- EU Directive 2011/65/EU & 2015/863/EU
- EU Directive 2006/95/EC (LVD)

#### CONSTRUCTION

##### Conductors

- 24 AWG solid bare annealed copper

##### Insulation

- CMP: FEP

##### Color Code

- Pair 1: Blue-White 0.84 ± 0.02 mm
- Pair 2: Orange-White 0.82 ± 0.02 mm
- Pair 3: Green-White 0.83 ± 0.02 mm
- Pair 4: Brown-White 0.82 ± 0.02 mm

##### Rip cord

- Polyester multi-yarn

##### Jacket

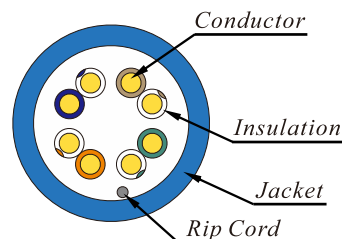
- CMP: LSFR-PVC

##### Marking

ELITE 350 CAT 5E GIGASYSTEM TESTED TO 350MHz---E142890 UTP 4PR 24AWG 75°C C(UL)US CMP(PCC-FT6)---ETL VERIFIED TO TIA-568.2-D mmyy<sup>1</sup> RoHS COMPLIANT XXXXFT

Note 1: mmyy is date code.

#### CROSS-SECTION



#### ELECTRICAL CHARACTERISTICS

DC Resistance Ohms/100 m (328 ft) @ 20°C	9.38
DC Resistance Unbalanced Individual Pair %	5.00
Delay Skew (Max) ns/100 m	45
Nom. Velocity of Propagation % Speed of Light	72
Characteristic Impedance Frequency (f):	Ohms 100 ± 15

#### PHYSICAL CHARACTERISTICS

Nominal Cable Diameter (mm)	4.4
Nominal Cable Weight (kg/1000 ft)	8.60
Minimum Bend Radius	≥ 4 times O.D.
Maximum Pulling Force	≤ 110 N
Temperature Rating (°C)	
Storage & shipping:	-20°C to 75°C
Installation:	0 to +60
Operation:	-20 to +60

### Transmission Performance (at 20°C)

Frequency (MHz)	IL (Max.)	NEXT (Min.)	PS. NEXT (Min.)	ACR (Min.)	PS. ACR (Min.)	ACRF (Min.)	PS. ACRF (Min.)	RL (Min.)	Propagation Delay (Max.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m
1	2.04	65.30	62.30	63.26	60.26	63.80	60.80	20.00	570.00
4	4.05	56.27	53.27	52.22	49.22	51.76	48.76	23.01	552.00
8	5.77	51.75	48.75	45.99	42.99	45.74	42.74	24.52	546.73
10	6.47	50.30	47.30	43.83	40.83	43.80	40.80	25.00	545.38
16	8.25	47.24	44.24	38.99	35.99	39.72	36.72	25.00	543.00
20	9.27	45.78	42.78	36.52	33.52	37.78	34.78	25.00	542.05
25	10.42	44.33	41.33	33.91	30.91	35.84	32.84	24.32	541.20
31.25	11.72	42.88	39.88	31.15	28.15	33.90	30.90	23.64	540.44
62.5	16.99	38.36	35.36	21.37	18.37	27.88	24.88	21.54	538.55
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60
150	27.54	32.66	29.66	5.11	2.11	20.28	17.28	18.87	536.94
200	32.42	30.78	27.78	N.A.	N.A.	17.78	14.78	18.00	536.55
250	36.85	29.33	26.33	N.A.	N.A.	15.84	12.84	17.32	536.28
300	40.97	28.14	25.14	N.A.	N.A.	14.26	11.26	16.77	536.08
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92
400	48.54	26.27	23.27	N.A.	N.A.	11.76	8.76	15.89	535.80

Values above 250MHz are for information only.