

ATS-424CMR-5E-*

U/UTP, 24AWG, Solid Bare Copper, Cat 5E, CMR, w/ Ripcord

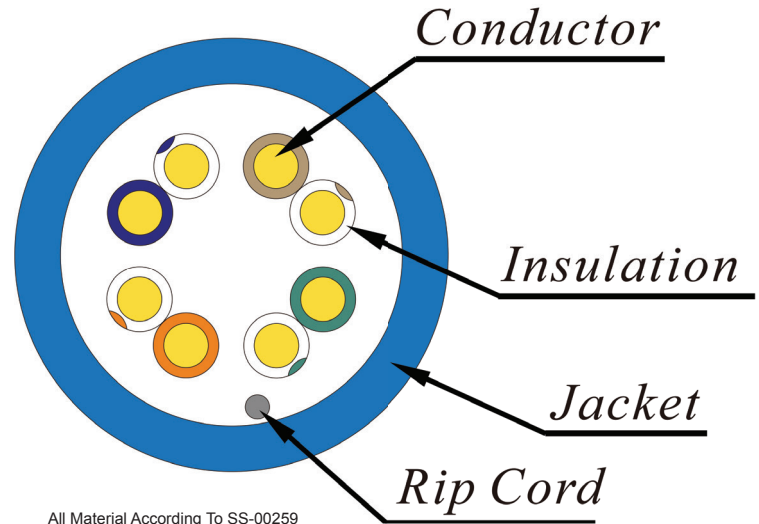


Features

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Applications

- 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+)



Material and Construction

Conductor	Material	24AWG solid bare copper	
Insulation	Material of single layer	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	0.87 ± 0.02 mm
		Orange & white/orange stripe	0.86 ± 0.02 mm
		Green & white/green stripe	0.87 ± 0.02 mm
Brown & white/brown stripe		0.86 ± 0.02 mm	
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Rip cord	Material	Polyester multi-yarn	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	4.8 ± 0.2 mm	
	Thickness	0.50 ± 0.05 mm	
	Color	Per customer's request	
Marking	ATRAS ATS-424CMR-5E CAT 5E GIGASYSTEM TESTED TO 350MHz--- E326692-W UTP 4PR 24AWG 75°C(UL)US CMR---ETL VERIFIED TO TIA- 568.2-D mmyy ¹ RoHS COMPLIANT XXXXFT <i>Note¹: mmyy is date code.</i>		

Applicable Standard

Electrical Transmission

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 (Edition 2.2)
- IEC 61156-5 (Edition 2.1)

Flame Test

- UL 1666 (CMR)

Material and Construction

- UL 444
- CSA 22.2 NO.214

EU Directive 2011/65/EU & 2015/863/EU

EU Directive 2006/95/EC (LVD)

CPR Class ECA

More information on the next page →

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Usage & Environmental Condition

Temperature storage & shipping: -20°C to 75°C

Temperature installation: 0°C to 60°C

Temperature operation: -20°C to 60°C

Minimum bending radius: ≥ 4 times of overall diameter

Maximum pulling tension: ≤ 110 N

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•m

Mutual capacitance: ≤ 5.6 nF/100m

Capacitance unbalance pair-to-ground: ≤ 330 pF/100m

TRANSMISSION PERFORMANCE TABLE (at 20°C)

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
MHz	Max. dB/100m	Min. dB/100m							Max. ns/100m	
1	2.04	65.30	62.30	63.26	60.26	63.80	60.80	20.00	570.00	45.00
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	

Values above 100MHz are for information only.