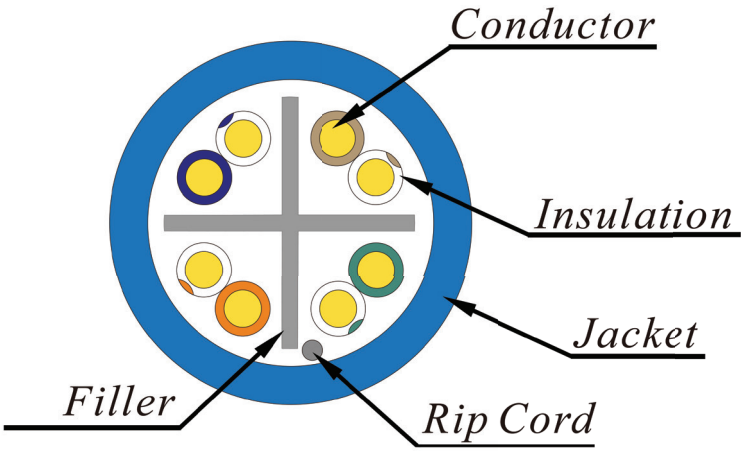
ATS-423CMR-6E-*

U/UTP, 23AWG, Solid Bare Copper, Cat 6, CMR, w/ Cross Filler & Ripcord

Atras Network Communications

Features

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 600 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 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

Material and Construction

Conductor	Material	23AWG solid bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue stripe	0.97 ± 0.02 mm
		Orange & white/orange stripe	0.93 ± 0.02 mm
		Green & white/green stripe	0.96 ± 0.02 mm
		Brown & white/brown stripe	0.93 ± 0.02 mm
Twisted	Description	Left hand direction	
Filler	Material	Polyolefin (PO)	
Assembly	Description	Left hand direction	
Rip cord	Material	Polyester multi-yarn	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	6.0 ± 0.2 mm	
	Thickness	0.55 ± 0.05 mm	
	Color	Per customer`s request	
Marking	ATRAS ATS-423CMR-6E CAT 6E GIGASYSTEM PLUS TESTED TO 600MHz---E326692-W UTP 4PR 23AWG 75°C(UL)US CMR---ETL VERIFIED TO TIA-568.2-D ISO/IEC 11801-1 mmyy[1] RoHS COMPLIANT XXXXFT *Note[1]: mmyy is date code.*		

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)

CE compliance date: 2010.01.01

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 / 300V

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	2.03	80.30	78.30	78.28	76.28	73.80	70.80	20.00	570.00	45.00
4	3.78	71.27	69.27	67.49	65.49	61.76	58.76	23.01	552.00	
8	5.32	66.75	64.75	61.43	59.43	55.74	52.74	24.52	546.73	
10	5.95	65.30	63.30	59.35	57.35	53.80	50.80	25.00	545.38	
16	7.55	62.24	60.24	54.68	52.68	49.72	46.72	25.00	543.00	
20	8.47	60.78	58.78	52.31	50.31	47.78	44.78	25.00	542.05	
25	9.51	59.33	57.33	49.83	47.83	45.84	42.84	24.32	541.20	
31.25	10.67	57.88	55.88	47.20	45.20	43.90	40.90	23.64	540.44	
62.5	15.38	53.36	51.36	37.98	35.98	37.88	34.88	21.54	538.55	
100	19.80	50.30	48.30	30.50	28.50	33.80	30.80	20.11	537.60	
150	24.71	47.66	45.66	22.95	20.95	30.28	27.28	18.87	536.94	
200	28.98	45.78	43.78	16.80	14.80	27.78	24.78	18.00	536.55	
250	32.85	44.33	42.33	11.48	9.48	25.84	22.84	17.32	536.28	
300	36.43	43.14	41.14	6.72	4.72	24.26	21.26	16.77	536.08	
350	39.79	42.14	40.14	2.35	0.35	22.92	19.92	16.30	535.92	
400	42.97	41.27	39.27	N.A.	N.A.	21.76	18.76	15.89	535.80	
450	46.01	40.50	38.50	N.A.	N.A.	20.74	17.74	15.53	535.70	
500	48.94	39.82	37.82	N.A.	N.A.	19.82	16.82	15.21	535.61	
550	51.76	39.19	37.19	N.A.	N.A.	18.99	15.99	14.92	535.54	
600	54.49	38.63	36.63	N.A.	N.A.	18.24	15.24	14.66	535.47	

Values above 250MHz are for information only.

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