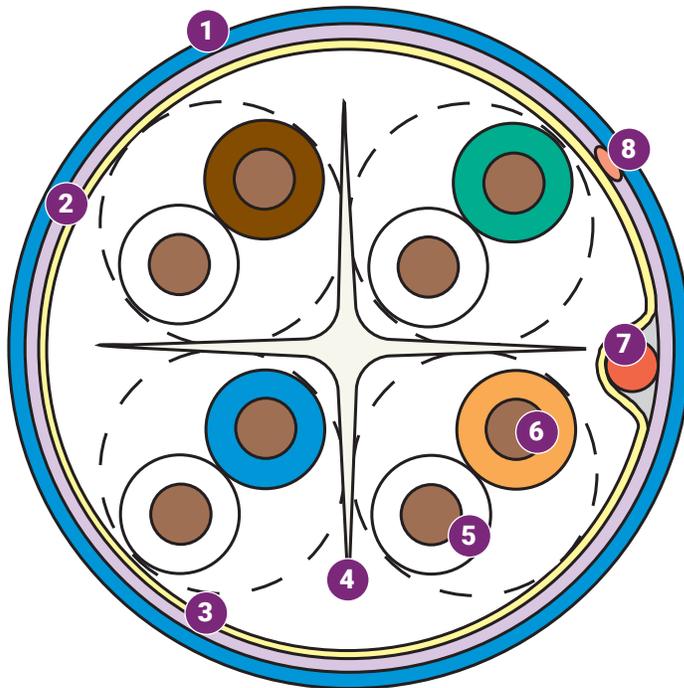


Category 6A F/UTP 4-Pair Cable

Regional Availability – North America



Siemon's Category 6A F/UTP cable provides channel performance exceeding ANSI/TIA-568.2-D Category 6A requirements. When combined with our Z-Max® shielded connectivity, the result is best in class channel performance capable of supporting 10GBASE-T operation over 100-meter, 4-connector topologies. In addition the screened construction ensures virtually zero alien crosstalk. The Category 6A F/UTP cabling system supports emerging and converging IP applications like Voice Over IP (VoIP), IP video and future 10 gigabit applications.



1. Jacket

Nominal Cable O.D.: 6.99mm (0.28 in.)

2. Aluminum Foil Tape

Shield enclosing drain wire.

3. Mylar Tape

4. Isolation Member

Maintains pair geometry before, during and after installation for optimal NEXT Loss performance.

5. Insulation

Nominal Cable O.D.: 1.17mm (0.046 in.)

6. Conductor

23AWG solid bare copper 0.57mm (0.023 in.)

7. Drain Wire

Applied longitudinal under, cable jacket

8. Rip Cord



Siemon's **PowerGUARD** technology with a 75°C operating temperature improves heat dissipation for reduced length derating and bundling requirements in remote powering applications, including PoE and power over HDBaseT (POH).



Compliance

- ANSI/TIA-568.2-D
- IEC 61156-5 Ed 2.0
- ISO/IEC 11801-1 Ed 1.0
- UL CMR and CSA FT4
- UL CMP and CSA FT6
- CMP-LP(0.6A) 120W

Cable Construction

- F/UTP
- 0.57mm (0.023 in.) 23 AWG solid bare copper
- 7.1mm (0.28 in.) nom. jacket diameter
- Central isolation member
- Shield is an aluminum foil tape enclosing a tinned copper drain wire
- Reverse sequential measurement markings on jacket

Applications Support

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-T
- HDBASE-T
- IEEE 802.3af (type 1 PoE)
- IEEE 802.3at (type 2 PoE)
- IEEE 802.3bt (type 3 PoE)
- IEEE 802.3bt (type 4 PoE)
- Power over HDBaseT (PoH)

ELECTRICAL SPECIFICATIONS

DC RESISTANCE	<8.5Ω/100m
DC RESISTANCE UNBALANCE	5%
MUTUAL CAPACITANCE	5.6 nF/100m
CAPACITANCE UNBALANCE	<330 pF/100m
CHARACTER IMPEDANCE (OHMS)	1 - 100 MHz: ± 15%, 100 - 750 MHz: ± 22%
NVP	67%
TCL	30-10 log(f/100) dB
DELAY SKEW	≤45ns
POE	Suitable for PoE Type 1, 2, 3, 4 and PoE

PHYSICAL PROPERTIES

CMP

CMR

PULLING TENSION (MAX)	110N (25 lbf)	110N (25 lbf)
BEND RADIUS (MIN)	50mm (1.89in.)	50mm (1.89in.)
INSTALLATION	0 to 60°C (+32 to 140°F)	0 to 60°C (+32 to 140°F)
STORAGE TEMPERATURE	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
OPERATING TEMPERATURE	-20 to 90°C (-4 to 194°F)	-20 to 75°C (-4 to 167°F)

TRANSMISSION PERFORMANCE

 Siemon Guaranteed Worst Case

 Siemon Typical

FREQUENCY (MHz)

TEST PARAMETER	1.0	4.0	10.0	16.0	20.0	31.25	62.5	100.0	200.0	250.0	300.0	400.0	500.0	550.0*	625.0*	750.0*
INSERTION LOSS (dB)	2.0	3.8	6.0	7.6	8.5	10.7	15.4	19.8	29.0	32.8	36.4	43.0	49.9	51.8	55.8	62.3
	1.8	3.4	5.4	6.9	7.7	9.9	14.3	18.1	27.3	31.1	35.0	40.0	42.0	43.0	44.9	49.0
NEXT (dB)	74.3	65.3	59.3	56.2	54.8	51.9	47.4	44.3	39.8	38.3	37.1	35.3	33.8	33.2	32.4	31.2
	86.0	77.0	71.0	68.0	67.0	64.0	59.0	56.0	52.0	50.0	49.0	47.0	47.0	46.0	46.0	45.0
PS NEXT (dB)	72.3	63.3	57.3	54.2	52.8	49.9	45.4	42.3	37.8	36.3	35.1	33.3	31.8	31.2	30.4	29.2
	82.3	73.3	67.3	64.2	62.8	59.9	55.4	52.0	47.8	46.0	45.0	43.0	42.0	42.0	41.0	41.0
ACR (dB)	72.3	61.5	53.3	46.7	46.3	41.2	32.0	24.5	10.5	5.5	0.7	-7.7	-15.1	-18.6	-23.5	-31.1
	84.2	73.6	65.6	61.1	59.3	54.1	44.7	37.9	24.7	18.9	14.0	7.0	5.0	3.0	1.1	-4.0
PS ACR (dB)	70.3	59.5	51.3	46.7	44.3	39.2	30.0	22.5	8.8	3.5	-1.3	-9.7	-17.1	-20.6	-25.5	-33.1
	80.5	69.9	61.9	57.3	55.1	50.0	41.1	33.9	20.5	14.9	10.0	3.0	0.0	-1.0	-3.9	-8.0
ACR-F (dB)	67.8	55.8	47.8	43.7	41.8	37.9	31.9	27.8	21.8	19.8	18.3	15.8	13.8	13.0	11.9	10.3
	91.0	79.0	71.0	67.0	65.0	61.0	55.0	51.0	45.0	43.0	38.0	36.0	34.0	33.0	33.0	32.0
PS ACR-F (dB)	64.8	52.8	44.8	40.7	38.8	34.9	28.9	24.8	18.8	16.8	15.3	12.8	10.8	10.0	8.9	7.3
	85.0	73.0	65.0	61.0	59.0	55.0	49.0	45.0	39.0	37.0	35.0	33.0	32.0	31.0	29.0	27.0
RETURN LOSS (dB)	20.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.0	17.3	16.8	15.9	15.2	14.9	14.5	14.0
	33.0	35.5	38.0	35.2	35.0	33.1	32.2	31.6	29.8	28.7	28.0	27.1	26.0	26.0	25.0	25.0
PROPAGATION DELAY (ns)	570	552	545	543	542	540	539	538	537	536	536	536	536	536	535	535
	545	527	520	518	517	515	514	513	512	511	511	511	510	510	505	504

All performance based on 100 meters (328 ft.). *Values for frequencies beyond industry requirements are for information only.

Ordering Information

305m (1000 ft.) Reel

Part Number	Description
9A6P4-A5-01-R1A	Plenum (CMP, CSA FT6), Black
9A6P4-A5-02-R1A	Plenum (CMP, CSA FT6), White
9A6P4-A5-03-R1A	Plenum (CMP, CSA FT6), Red
9A6P4-A5-04-R1A	Plenum (CMP, CSA FT6), Gray
9A6P4-A5-05-R1A	Plenum (CMP, CSA FT6), Yellow
9A6P4-A5-06-R1A	Plenum (CMP, CSA FT6), Blue
9A6P4-A5-07-R1A	Plenum (CMP, CSA FT6), Green
9A6P4-A5-08-R1A	Plenum (CMP, CSA FT6), Violet
9A6P4-A5-09-R1A	Plenum (CMP, CSA FT6), Orange
9A6R4-A5-01-R1A	Riser (CMR, CSA FT4), Black
9A6R4-A5-02-R1A	Riser (CMR, CSA FT4), White
9A6R4-A5-03-R1A	Riser (CMR, CSA FT4), Red
9A6R4-A5-04-R1A	Riser (CMR, CSA FT4), Gray
9A6R4-A5-05-R1A	Riser (CMR, CSA FT4), Yellow
9A6R4-A5-06-R1A	Riser (CMR, CSA FT4), Blue
9A6R4-A5-07-R1A	Riser (CMR, CSA FT4), Green
9A6R4-A5-08-R1A	Riser (CMR, CSA FT4), Violet
9A6R4-A5-09-R1A	Riser (CMR, CSA FT4), Orange

Lead time and minimum order quantities may vary by cable type. Please contact Customer Service for details.

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

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