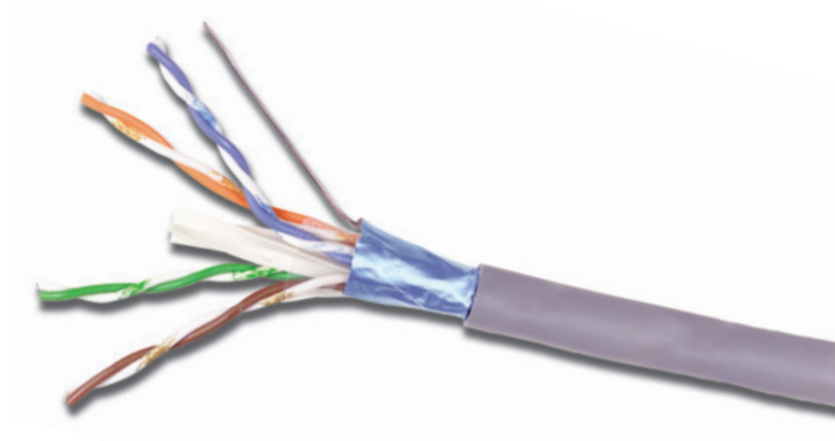


# Category 6A F/UTP 4-Pair Cable - International

Siemon's Category 6A F/UTP cable supports channel performance exceeding ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E<sub>A</sub> requirements. When combined with our screened Category 6A series connectivity, the result is a channel capable of supporting 10GBASE-T operation over 100-metre, 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.



CABLE — INTERNATIONAL

## CABLE FEATURES:

- FUTP
- Nominal jacket OD: 6.8mm (0.27 in.)
- 23 AWG 0.57mm (0.022 in.) solid (non-tinned) copper
- Central isolation member
- Shield is an aluminum foil tape enclosing a 0.51mm (24AWG) tinned copper drain wire
- 75° C temperature rating

## STANDARDS COMPLIANCE:

- ISO/IEC 11801 Ed 2.2
- ANSI/TIA-568-C.2 (Category 6A)
- IEC 61156-5 Ed 2.0 (Category 6A)
- UL CMR and CSA FT4
- UL CM, IEC 60332-1, Class Eca
- LSOH: IEC 60332-1, IEC 60332-2-22, IEC 60754, IEC 61034, and EN 50575 Class D<sub>ca</sub>S<sub>1</sub>d<sub>1</sub>a<sub>1</sub>

## APPLICATIONS SUPPORT:

- 10GBASE-T
- 1000BASE-T
- 100BASE-T
- 10BASE-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)

### Jacket

- Nominal Cable O.D.:  
6.8mm ± 0.6  
(0.27in ± 0.02)
- Jacket Material:  
CM, LSOH and CMR options available

### Mylar Tape

### Aluminum Foil Tape

- Shield enclosing drain wire

### Isolation Member

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

### Drain Wire

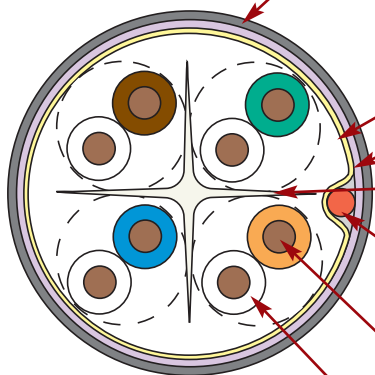
- Applied longitudinally under cable jacket
- 7-Strand 0.05mm tinned copper drain wire

### Conductor

- 0.57mm (23 AWG) solid bare copper

### Insulation

- Conductor Insulation: HDPE  
1.18mm max conductor insulation diameter



## ELECTRICAL SPECIFICATIONS

DC Resistance	<8.5 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<160 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-750 MHz: 100 ± 22%
NVP	67%
TCL	30-10 log(f/100) dB
Delay Skew	≤45ns
PoE	Suitable for PoE & PoE +

## PHYSICAL PROPERTIES

	LSOH	CM/CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	50mm (2 in.)	50mm (2 in.)
Installation Temperature	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 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)

## TRANSMISSION PERFORMANCE



GUARANTEED WORSE CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1.0*	2.1	1.8	75.3	86.0	73.3	82.3	73.2	84.2	71.2	80.5	73.3	91.0	71.3	85.0	20.0	33.0	570	570
4.0	3.8	3.4	66.3	77.0	64.3	73.3	62.5	73.6	60.5	69.9	61.3	79.0	59.3	73.0	23.0	35.5	545	545
10.0	5.9	5.4	60.3	71.0	58.3	67.3	54.4	65.6	52.4	61.9	53.3	71.0	51.3	65.0	25.0	38.0	543	543
16.0	7.5	6.9	57.2	68.0	55.2	64.2	49.8	61.1	47.8	57.3	49.2	67.0	47.2	61.0	25.0	35.2	542	542
20.0	8.4	7.7	55.8	67.0	53.8	62.8	47.4	59.3	45.4	55.1	47.3	65.0	45.3	59.0	25.0	35.0	540	540.4
31.25	10.5	9.9	52.9	64.0	50.9	59.9	42.4	54.1	40.4	50.0	43.4	61.0	41.4	55.0	23.6	33.1	539	538.6
62.5	15.0	14.3	48.4	59.0	46.4	55.4	33.4	44.7	31.4	41.1	37.4	55.0	35.4	49.0	21.5	32.2	538	537.6
100.0	19.1	18.1	45.3	56.0	43.3	52.0	26.2	37.9	24.2	33.9	33.3	51.0	31.3	45.0	20.1	31.6	537	536.5
200.0	27.6	27.3	40.8	52.0	38.8	47.8	13.2	24.7	11.2	20.5	27.3	45.0	25.3	39.0	18.0	29.8	536	536.3
250.0	31.1	31.1	39.3	50.0	37.3	46.0	8.3	18.9	6.3	14.9	25.3	43.0	23.3	37.0	17.3	28.7	536	536.1
300.0	34.3	35.0	38.1	49.0	36.1	45.0	3.9	14.0	-1.9	10.0	23.8	38.0	21.8	35.0	17.3	28.0	536	535.8
400.0	40.1	40.0	36.3	47.0	34.3	43.0	-3.8	7.0	-5.8	3.0	21.3	36.0	19.3	33.0	17.3	27.1	536	535.6
500.0	45.3	42.0	34.8	47.0	32.8	42.0	-10.4	5.0	-12.4	0.0	19.3	34.0	17.3	32.0	17.3	26.0	536	510
550.0*	-	43.0	-	46.0	-	42.0	-	3.0	-	-1.0	-	33.0	-	31.0	-	26.0	536	-
625.0*	-	44.9	-	46.0	-	41.0	-	1.1	-	-3.9	-	33.0	-	29.0	-	25.0	535	-
750.0*	-	49.0	-	45.0	-	41.0	-	-4.0	-	-8.0	-	32.0	-	27.0	-	25.0	535	-

\*Values for frequencies above industry requirements are for information only.

All performance based on 100 metres (328 ft.).

## Ordering Information:

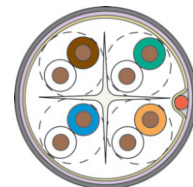
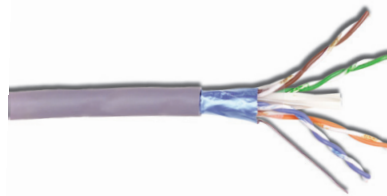
9A6(X)4-A5 ..... 305m (1000 ft.) reel

### Jacket Material

**M** = PVC (CM, IEC 60332-1), Grey Jacket, Class E<sub>ca</sub>

**R** = Riser (CMR, CSA FT4), Blue Jacket

**L** = LSOH (IEC 60332-1, IEC 60332-3-22), Violet Jacket, Class E<sub>ca</sub>, D<sub>ca</sub>



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

### Worldwide Headquarters

**North America**  
Watertown, CT USA  
Phone (1) 860 945 4200

### Regional Headquarters

**Europe Russia Africa**  
Chertsey, Surrey, England  
Phone (44) 0 1932 571771

### Regional Headquarters

**China**  
Shanghai, P.R. China  
Phone (86) 215385 0303

### Regional Headquarters

**Latin America**  
Bogota, Colombia  
Phone (571) 657 1950/51/52

### Regional Headquarters

**India Middle East**  
Dubai, United Arab Emirates  
Phone (971) 4 3689743

### Regional Headquarters

**Asia Pacific**  
Sydney, Australia  
Phone (86) 21 5385 0303

### Siemon Interconnect Solutions

**Watertown, CT USA**  
Phone (1) 860 945 4213 US  
www.siemon.com/SIS