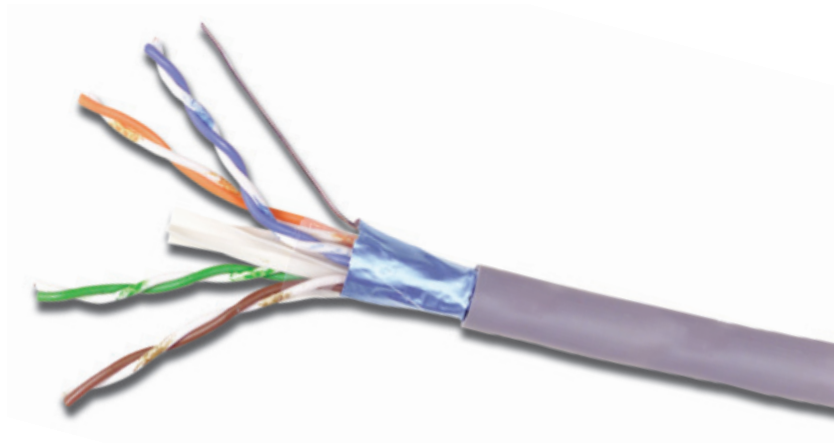


Category 6A F/UTP 4-Pair Cable - International

Siemon's Category 6A F/UTP cable supports channel performance exceeding ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E_A 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 568-2.D
- 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 60332-3-22, IEC 60754, IEC 61034, and EN 50575 Class D_{caS₁d₁a₁}

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

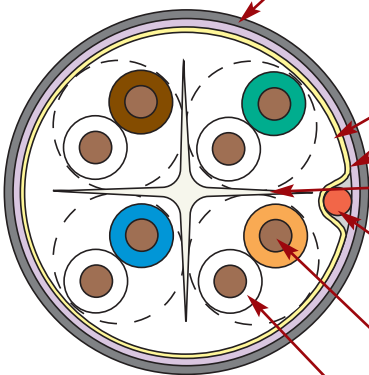
- Applied longitudinally under cable jacket
- 7-Strand 0.05mm tinned copper drain wire

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:

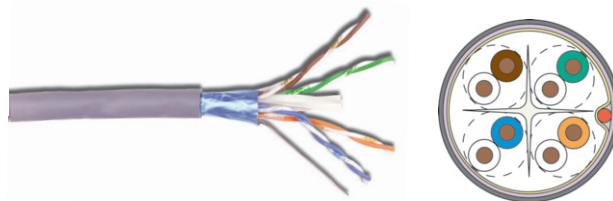
9A6(X)4-A5 305m (1000 ft.) reel

Jacket Material

M = PVC (CM, IEC 60332-1), Grey Jacket, Class E_{ca}

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

L = LSOH (IEC 60332-1, IEC 60332-3-22), Violet Jacket, Class E_{ca}, D_{ca}



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
Chertsy, 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