

# Category 6A F/FTP Cable - LSOH - International

Simon's category 6A / Class E<sub>A</sub> 4-pair F/FTP cable supports channel performance exceeding ANSI/TIA and ISO/IEC category 6A requirements. This cable uses a 5-foil screened design consisting of 4 individual foils wrapped pairs plus an overall foil shield. When combined with our shielded Z-MAX® 6A connectivity, the end result is a channel capable of supporting 10GBASE-T operation over 100-meter, 4-connector topologies. In addition, the fully shielded construction ensures virtually zero alien crosstalk.



Simon'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).

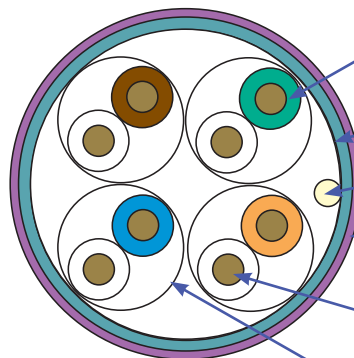


## COMPLIANCE

- ISO/IEC 11801-1 Ed 1.0 (Class E<sub>A</sub>)
- ANSI/TIA-568.2-D (Category 6A)
- IEC 61156-5 Ed 2.0 (Category 6A)
- IEC 60332-1, IEC 60754-2, IEC 61034
- EN 50399 Class D s<sub>2</sub>d<sub>2</sub>a<sub>1</sub>
- 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)

## CABLE CONSTRUCTION

- Conductor Insulation: Foam PE
- Material: LSOH
- Drain Wire: (Solid Tinned Copper)
- Aluminium Foil Overall Shield
- Conductor: 23 AWG (0.56mm) Solid Copper
- Aluminium Foil Pair Shield



### Conductor Insulation

- Foam PE
- 1.28mm (0.05 in.) ± 0.5mm

### Aluminum Foil Overall Shield

### Drain Wire

- Solid tinned copper

### Outer Jacket

- Material - LSFROH
- O.D. = 7.2mm (0.28 in.) ± 0.3mm

### Conductor

- 23AWG solid copper
- 0.56mm (0.021 in.)

### Aluminum Foil Pair Shield

# Product Information

## ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<160pF/100m
NVP	74%
TCL	40-10 log (f)dB
Coupling Attenuation	≥55 dB
Delay Skew	<20ns/100m max.

## PHYSICAL PROPERTIES

LSOH	
Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	50mm (2.0 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

## TRANSMISSION PERFORMANCE



GUARANTEED WORST CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0*	2.1	1.8	75.3	93.5	73.3	92.7	73.2	93.1	71.2	90.9	73.3	97.1	71.3	93.7	20.0	23.9	570.0	448
4.0	3.8	3.6	66.3	98.3	64.3	95.9	62.5	94.7	60.5	92.4	61.3	96.4	59.3	93.9	23.0	27.3	552.0	442
10.0	5.9	5.5	60.3	87.5	58.3	87.2	54.4	82.0	52.4	81.6	53.3	86.4	51.3	85.7	25.0	32.7	545.4	439
16.0	7.5	7.1	57.2	83.4	55.2	82.9	49.8	76.3	47.8	75.8	49.2	81.2	47.2	81.1	25.0	31.2	543.0	438
20.0	8.4	8.0	55.8	77.4	53.8	76.7	47.4	69.4	45.4	68.7	47.3	75.0	45.3	74.4	25.0	32.4	542.0	437
31.25	10.5	10.1	52.9	81.1	50.9	80.4	42.4	71.0	40.4	70.3	43.4	73.5	41.4	73.1	23.6	30.0	540.4	436
62.5	15.0	14.3	48.4	87.1	46.4	84.1	33.4	72.7	31.4	69.8	37.4	74.2	35.4	73.1	21.5	31.8	538.6	435
100.0	19.1	18.2	45.3	80.6	43.3	79.4	26.2	62.3	24.2	61.1	33.3	68.3	31.3	66.8	20.1	31.3	537.6	435
200.0	27.6	25.8	40.8	74.4	38.8	71.2	13.2	48.5	11.2	45.4	27.3	63.9	25.3	62.4	18.0	31.3	536.5	434
250.0	31.1	28.9	39.3	74.4	37.3	7.8	8.3	45.9	6.3	42.7	25.3	61.0	23.3	59.5	17.3	29.5	536.3	434
300.0	34.3	31.9	38.1	72.5	36.1	69.8	3.9	41.9	-1.9	37.8	23.8	62.0	21.8	60.3	17.3	26.2	536.1	434
400.0	40.1	37.2	36.3	68.9	34.3	65.7	-3.8	31.7	-5.8	28.4	21.3	54.6	19.3	52.3	17.3	26.2	535.8	434
500.0	45.3	41.6	34.8	65.9	32.8	64.0	-10.4	23.9	-12.4	22.1	19.3	55.9	17.3	53.8	17.3	28.0	535.6	434
550.0*	-	44.0	-	58.2	-	54.9	-	14.0	-	10.4	-	41.5	-	40.4	-	20.3	-	434
625.0*	-	46.2	-	57.6	-	56.5	-	11.2	-	9.3	-	41.5	-	39.8	-	22.6	-	434
750.0*	-	51.9	-	58.6	-	56.0	-	6.6	-	4.2	-	42.6	-	40.4	-	19.2	-	434

\*Values for frequencies beyond 500 MHz are for information only.

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

## Ordering Information

### Part Number Description

9N6L4-A5 ..... Category 6A F/FTP cable, LSOH, violet jacket, 305m (1000 ft.)



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