

Category 6A F/UTP Indoor/Outdoor Cable - Global

Simon's Category 6A F/UTP Indoor/Outdoor (I/O) cable delivers TIA and ISO/IEC performance requirements for Category 6A/Class EA. This 600V cable with its industrial PVC jacket provides oil and sunlight resistance along with reliable cold bend performance. These features make this robust cable designed to support the latest applications in the industrial environment for light to medium duty and static industrial applications. Being CMR and CMX rated, this cable transitions easily from indoor to outdoor environments and is also suitable for cable tray installations. Ideal for use in both indoor riser/cable tray and outdoor applications such as outdoor security cameras, WAP's, and parking garages where cable is not subject to long term emersion. This cable is not suitable for direct burial applications.



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).



CABLE FEATURES

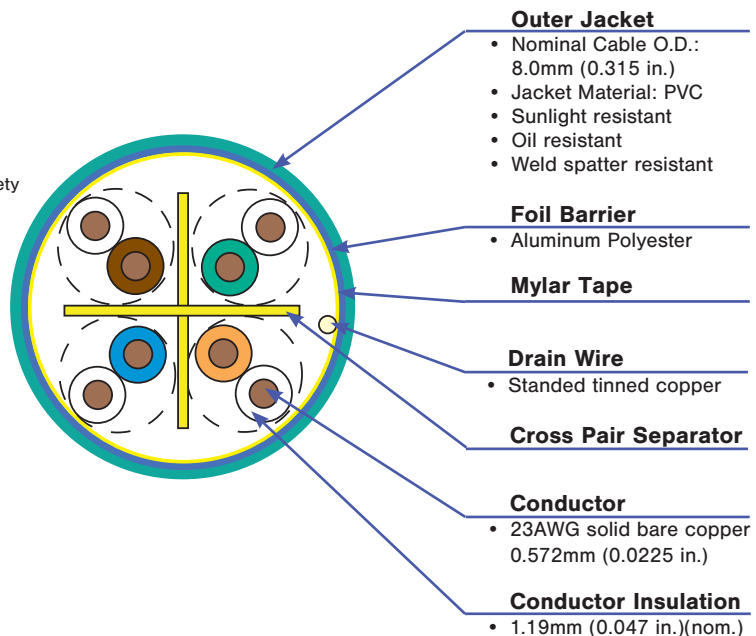
- F/UTP
- Jacket Color: Teal
- 600V AWM Design
- Nominal jacket OD: 8.0mm (0.315 in.)
- 23 AWG 0.57mm (0.022 in.) solid bare copper
- Industrial PVC Jacket
- Sunlight Resistant
- Oil Resistant
- Weld Spatter Resistant
- 80° C temperature rating
- For use in light to medium duty, static, industrial applications

STANDARDS COMPLIANCE

- ISO/IEC 11801-1 (Class Ea)
- ANSI/TIA-568.2-D (Category 6A)
- IEC 61156-5 (Category 6A)
- UL444 CMX Outdoor
- UL1581 50.182 Oil Resistant 60° C
- UL444 7.22 Sunlight Resistant 720 hrs
- UL758 600V 80° C AWM (Appliance Wiring Material) standard for consistency & safety
- UL444 7.10 Cold Bend -40° C
- UL2556 7.10 75 cycles/1.5 lb. load
- RoHS

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)



Product Information

ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.1 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	66%
TCL	30-10 log(f/100) dB
Delay Skew	≤45ns/100m

PHYSICAL PROPERTIES

Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	32mm (1.26 in.)
Installation Temperature	-20 to 80°C (-4 to 176°F)
Storage Temperature	-40 to 80°C (-40 to 176°F)
Operating Temperature	-40 to 80°C (-40 to 176°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE

SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB/100)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical	Guaranteed Worst Case	Siemon Typical
1.0	2.1	1.8	75.3	95.7	73.3	92.7	73.2	88.1	71.2	88.9	20.0	30.4	73.2	88.1	71.2	87.8	570.0	554.8
4.0	3.8	3.5	66.3	85.9	64.3	83.0	62.5	77.8	60.5	78.1	23.0	29.7	62.5	77.8	60.5	77.7	552.0	539.2
10.0	5.9	5.5	60.3	75.8	58.3	74.4	54.4	70.5	52.4	70.6	25.0	31.5	54.4	70.5	52.4	70.0	545.4	533.9
16.0	7.5	6.9	57.2	73.2	55.2	72.6	49.8	67.5	47.8	66.4	25.0	31.9	49.8	67.5	47.8	66.7	543.0	532.0
20.0	8.4	7.7	55.8	73.9	53.8	70.5	47.4	65.4	45.4	64.3	25.0	32.5	47.4	65.4	45.4	64.7	542.0	531.2
31.2	10.5	9.7	52.9	67.3	50.9	65.3	42.4	62.0	40.4	60.6	23.6	34.1	42.4	62.0	40.4	61.2	540.4	529.8
62.5	15.0	13.5	48.4	64.7	46.4	61.9	33.4	59.3	31.4	58.0	21.5	32.8	33.4	59.3	31.4	58.0	538.6	528.1
100.0	19.1	17.5	45.3	58.8	43.3	57.1	26.2	54.6	24.2	53.0	20.1	30.1	26.2	54.6	24.2	53.0	537.6	527.2
160.0	24.5	22.1	42.2	55.9	40.2	55.2	17.7	54.5	15.7	51.7	18.7	34.4	17.7	54.5	15.7	51.4	536.8	526.5
200.0	27.6	24.9	40.8	54.9	38.8	51.9	13.2	48.2	11.2	45.4	18.0	27.6	13.2	48.2	11.2	45.5	536.5	526.3
250.0	31.1	27.9	39.3	54.1	37.3	52.2	8.3	44.2	6.3	43.0	17.3	24.5	8.3	44.2	6.3	43.0	536.3	526.0
300.0	34.3	30.6	38.1	52.2	36.1	50.5	3.9	41.5	1.9	39.7	17.3	27.9	3.9	41.5	1.9	39.6	536.1	525.9
400.0	40.1	35.6	36.3	50.8	34.3	47.5	-3.8	49.6	-5.8	45.9	17.3	26.6	-3.8	49.6	-5.8	46.6	535.8	525.6
500.0	45.3	40.0	34.8	47.7	32.8	46.3	-10.4	42.0	-12.4	39.5	17.3	23.2	-10.4	42.0	-12.4	40.0	535.6	525.4
550.0*	-	42.1	-	46.9	-	43.5	-	42.6	-	39.7	-	21.5	-	42.6	-	40.4	-	525.4
625.0*	-	42.3	-	46.2	-	43.0	-	44.0	-	40.7	-	23.8	-	44.0	-	40.4	-	525.3
750.0*	-	42.3	-	46.2	-	43.0	-	44.0	-	40.7	-	23.8	-	44.0	-	40.4	-	525.3

*Values above 500 MHz are for information only.

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

Ordering Information

Part Number	Description
9A6W4-A5-12-R1A	Category 6A Indoor/Outdoor Cable. 4-pair, 23AWG, F/UTP, Teal, 305m (1000 ft.) Reel.



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

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