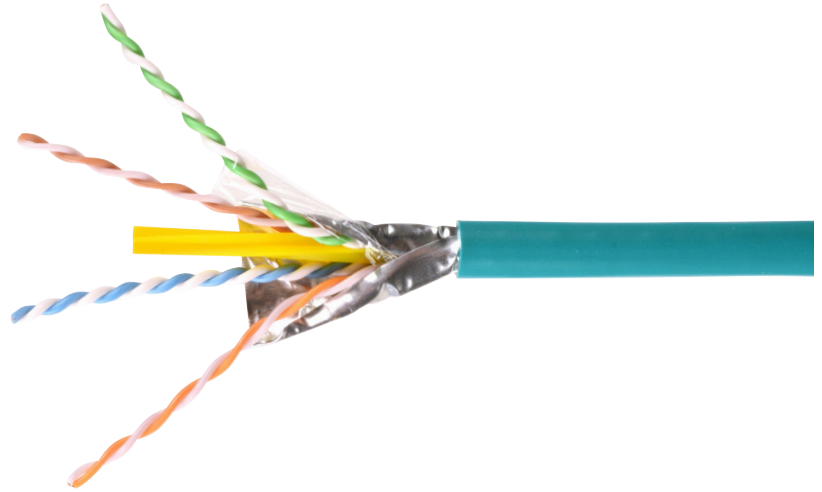


# Category 6A UTP Indoor/Outdoor Cable - Global

Simon's Category 6A UTP Indoor/Outdoor (I/O) cable delivers TIA and ISO/IEC performance requirements for Category 6A/Class EA. The use of GT (Gap Technology) for a discontinuous shield allows for exceptional alien crosstalk and requires no bonding or grounding for simple, efficient installations. 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. 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.



## CABLE FEATURES

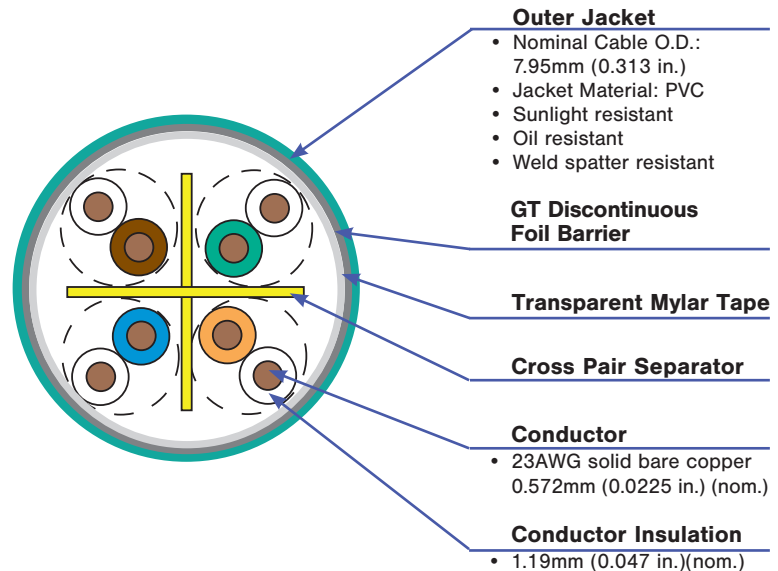
- GT (Gap Technology) UTP
- Jacket Color: Teal
- 600V AWM Design
- Nominal jacket OD: 7.95mm (0.313 in.)
- 23 AWG 0.57mm (0.022 in.) solid bare copper
- Ruggedized PVC Jacket
- Sunlight Resistant
- Oil Resistant
- Weld Spatter Resistant
- 80° C temperature rating

## 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

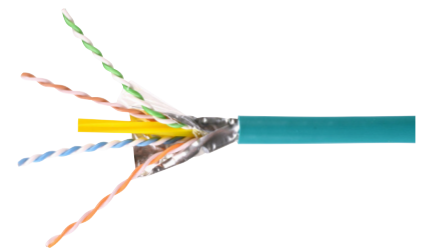
| Frequency (MHz) | Insertion Loss (dB)   |                | NEXT (dB)             |                | PS NEXT (dB)          |                | ACR-F (dB)            |                | PSACR-F (dB)          |                | Return Loss (dB)      |                | ACR-N (dB)            |                | PSACR-N (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                   | 1.9            | 75.3                  | 82.6           | 73.3                  | 81.1           | 73.2                  | 82.2           | 71.2                  | 83.3           | 20.0                  | 28.5           | 73.2                  | 82.2           | 71.2                  | 80.0           | 570.0                  | 555.3          |
| 4.0             | 3.9                   | 3.6            | 66.3                  | 83.2           | 64.3                  | 81.3           | 62.4                  | 81.5           | 60.4                  | 81.7           | 23.0                  | 28.3           | 62.4                  | 81.5           | 60.4                  | 79.4           | 552.0                  | 539.9          |
| 10.0            | 6.0                   | 5.6            | 60.3                  | 75.4           | 58.3                  | 73.6           | 54.3                  | 78.7           | 52.3                  | 75.2           | 25.0                  | 32.7           | 54.3                  | 78.7           | 52.3                  | 75.1           | 545.4                  | 534.6          |
| 16.0            | 7.5                   | 7.0            | 57.2                  | 73.7           | 55.2                  | 71.3           | 49.7                  | 75.6           | 47.7                  | 71.5           | 25.0                  | 30.9           | 49.7                  | 75.6           | 47.7                  | 72.4           | 543.0                  | 532.7          |
| 20.0            | 8.4                   | 7.9            | 55.8                  | 72.7           | 53.8                  | 71.0           | 47.4                  | 73.0           | 45.4                  | 71.0           | 25.0                  | 33.7           | 47.4                  | 73.0           | 45.4                  | 70.3           | 542.0                  | 531.8          |
| 31.2            | 10.5                  | 9.8            | 52.9                  | 70.3           | 50.9                  | 67.6           | 42.3                  | 68.5           | 40.3                  | 66.4           | 23.6                  | 29.2           | 42.3                  | 68.5           | 40.3                  | 65.8           | 540.4                  | 530.4          |
| 62.5            | 14.8                  | 13.7           | 48.4                  | 61.1           | 46.4                  | 58.7           | 33.6                  | 62.8           | 31.6                  | 59.9           | 21.5                  | 31.2           | 33.6                  | 62.8           | 31.6                  | 59.6           | 538.6                  | 528.8          |
| 100.0           | 19.2                  | 17.7           | 45.3                  | 61.3           | 43.3                  | 58.0           | 26.1                  | 57.4           | 24.1                  | 54.5           | 20.1                  | 28.8           | 26.1                  | 57.4           | 24.1                  | 54.6           | 537.6                  | 527.8          |
| 160.0           | 24.5                  | 22.5           | 42.2                  | 54.0           | 40.2                  | 52.7           | 17.7                  | 48.7           | 15.7                  | 48.3           | 18.7                  | 30.2           | 17.7                  | 48.7           | 15.7                  | 47.6           | 536.8                  | 527.2          |
| 200.0           | 27.6                  | 25.2           | 40.8                  | 56.5           | 38.8                  | 54.1           | 13.2                  | 46.4           | 11.2                  | 46.1           | 18.0                  | 28.8           | 13.2                  | 46.4           | 11.2                  | 46.3           | 536.5                  | 526.9          |
| 250.0           | 31.1                  | 28.3           | 39.3                  | 55.4           | 37.3                  | 53.2           | 8.3                   | 48.7           | 6.3                   | 47.9           | 17.3                  | 25.5           | 8.3                   | 48.7           | 6.3                   | 47.1           | 536.3                  | 526.6          |
| 300.0           | 34.3                  | 31.1           | 38.1                  | 51.0           | 36.1                  | 47.3           | 3.9                   | 50.5           | 1.9                   | 48.3           | 17.3                  | 23.9           | 3.9                   | 50.5           | 1.9                   | 48.9           | 536.1                  | 526.5          |
| 400.0           | 40.1                  | 36.0           | 36.3                  | 50.8           | 34.3                  | 47.5           | -3.8                  | 40.5           | -5.8                  | 40.2           | 17.3                  | 23.7           | -3.8                  | 40.5           | -5.8                  | 40.4           | 535.8                  | 526.2          |
| 500.0           | 45.3                  | 40.5           | 34.8                  | 46.8           | 32.8                  | 43.5           | -10.4                 | 43.6           | -12.4                 | 41.4           | 17.3                  | 25.7           | -10.4                 | 43.6           | -12.4                 | 41.2           | 535.6                  | 526.0          |
| 550*            | -                     | 42.6           | -                     | 43.1           | -                     | 42.4           | -                     | 38.9           | -                     | 37.3           | -                     | 22.4           | -                     | 38.9           | -                     | 36.3           | -                      | 526.0          |
| 625*            | -                     | 42.8           | -                     | 42.1           | -                     | 40.7           | -                     | 38.2           | -                     | 36.2           | -                     | 23.7           | -                     | 38.2           | -                     | 35.6           | -                      | 525.9          |
| 750*            | -                     | 42.8           | -                     | 42.1           | -                     | 40.7           | -                     | 38.2           | -                     | 36.2           | -                     | 23.7           | -                     | 38.2           | -                     | 35.6           | -                      | 525.9          |

\*Values above 500 MHz are for information only.

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

## Ordering Information

| Part Number          | Description  |
|----------------------|--|
| 9U6W4-A5-12-R1A..... | Category 6A UTP Indoor/Outdoor, 23AWG, 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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