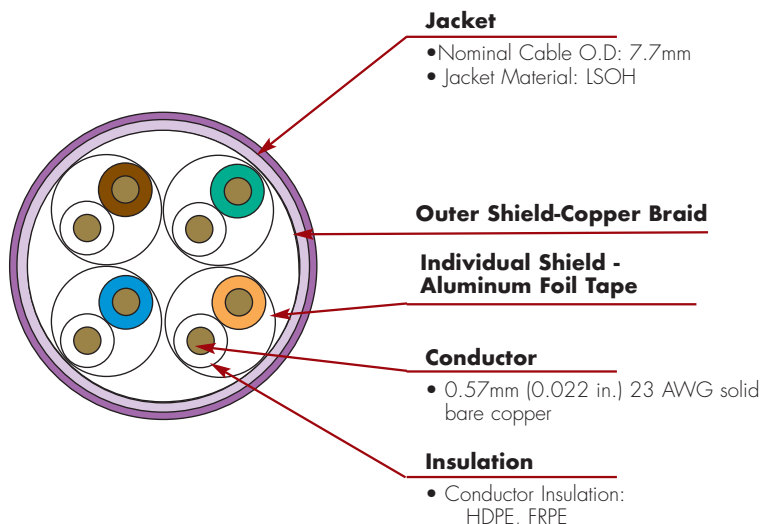


## Category 7<sub>A</sub> 1000 MHz Cable - International

Siemon's fully shielded Category 7<sub>A</sub> 1000 MHz end-to-end cabling solution is the highest-performing, most secure twisted-pair copper cabling system available. Siemon's Category 7<sub>A</sub> 1000 MHz SFTP cable perfectly complements the performance of the TERA outlet exceeding all ISO/IEC requirements for Category 7<sub>A</sub>/Class F<sub>A</sub> transmission performance. A fully shielded cable with individual foils around each pair coupled with a high screen coverage outer braid provides perfect immunity from outside interferences. In addition, the cable jacket has been qualified for mechanical reliability in high temperature environments up to 75°C. In PoE remote power applications, this cable can be installed in environments up to 60°C and will not experience degradation due to heat rise inside the cable bundle. Further, this 7A cable is capable of running multiple lower speed applications, known as cable sharing, from one drop. Siemon cable is the ideal way to ensure optimum channel performance and is essential for a complete end-to-end warranted solution.



### COMPLIANCE

- ISO/IEC 11801: Ed 2.2 (Class F<sub>A</sub>)
- IEC 61156-5 Ed 2.1 (Category 7<sub>A</sub>)
- EN 50288 • EN 55022
- EN 50173 • EN 55024
- LSOH: IEC 60332-1, IEC 60332-3-22, IEC 60754, and IEC 61034
- EN50399 Class C<sub>ca</sub>S<sub>1a</sub>d<sub>1a1</sub>\*

\*Initial type test complete. System 1+ requirements pending (see page 2.)

### CABLE CONSTRUCTION

- S/FTP
- Nominal jacket OD: 7.7mm (0.30 in.)
- 0.57mm (0.022 in.) solid (non-tinned) copper
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminium-polyester foil
- Overall tinned-copper braid

## ELECTRICAL SPECIFICATIONS

|                                 |                                                                                          |
|---------------------------------|------------------------------------------------------------------------------------------|
| DC Resistance                   | <7.32 $\Omega$ /100m                                                                     |
| DC Resistance Unbalance         | $\leq 2\%$                                                                               |
| Mutual Capacitance              | 5.6 nF/100m                                                                              |
| Capacitance Unbalance           | $\leq 160$ pF/100m                                                                       |
| Characteristic Impedance (ohms) | 1-100 MHz: $100 \pm 15\%$<br>100-250 MHz: $100 \pm 22\%$<br>250-1000 MHz: $100 \pm 25\%$ |
| NVP                             | 70%                                                                                      |
| TCL                             | 40-10 x log(f)dB                                                                         |
| Delay Skew                      | 25ns/100m                                                                                |

## PHYSICAL PROPERTIES

|                          | LSOH                      |
|--------------------------|---------------------------|
| Pulling Tension (max)    | 110N (25 lbf)             |
| Bend Radius (min)        | 50mm (2.0 in.)            |
| Installation Temperature | 0 to 75°C (+32 to 167°F)  |
| Storage Temperature      | -20 to 75°C (-4 to 167°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) |      | PS ACR-F (dB) |      | Return Loss (dB) |      | Propagation Delay (ns) |     |
|-----------------|---------------------|------|-----------|-------|--------------|-------|----------|-------|------------|-------|------------|------|---------------|------|------------------|------|------------------------|-----|
| 1.0*            | 1.9                 | 1.6  | 78.0      | 105.0 | 75.0         | 102.0 | 76.1     | 103.0 | 73.1       | 100.0 | 77.0       | 96.0 | 75.0          | 94.0 | 20.0             | 31.0 | 536                    | 512 |
| 4.0             | 3.5                 | 3.0  | 78.0      | 105.0 | 75.0         | 102.0 | 74.6     | 102.0 | 71.6       | 99.0  | 77.0       | 96.0 | 75.0          | 94.0 | 23.0             | 34.0 | 518                    | 494 |
| 10.0            | 5.4                 | 4.9  | 78.0      | 105.0 | 75.0         | 102.0 | 72.6     | 100.0 | 69.6       | 97.0  | 74.0       | 96.0 | 71.0          | 94.0 | 25.0             | 35.0 | 511                    | 487 |
| 16.0            | 6.8                 | 6.3  | 78.0      | 105.0 | 75.0         | 102.0 | 71.2     | 99.0  | 68.2       | 96.0  | 70.0       | 96.0 | 67.0          | 94.0 | 25.0             | 35.0 | 509                    | 485 |
| 20.0            | 7.5                 | 7.0  | 78.0      | 105.0 | 75.0         | 102.0 | 70.3     | 98.0  | 67.4       | 95.0  | 68.0       | 96.0 | 65.0          | 94.0 | 25.0             | 35.0 | 508                    | 484 |
| 31.25           | 9.6                 | 8.9  | 78.0      | 105.0 | 75.0         | 102.0 | 68.5     | 96.0  | 65.5       | 93.0  | 64.0       | 93.0 | 61.0          | 91.0 | 23.6             | 34.0 | 506                    | 482 |
| 62.5            | 13.7                | 12.8 | 78.0      | 105.0 | 75.0         | 102.0 | 64.3     | 92.0  | 61.3       | 89.0  | 58.0       | 88.0 | 55.0          | 86.0 | 21.5             | 32.0 | 505                    | 481 |
| 100.0           | 17.5                | 16.5 | 76.0      | 105.0 | 73.0         | 102.0 | 58.5     | 89.0  | 55.5       | 86.0  | 54.0       | 82.0 | 51.0          | 80.0 | 20.1             | 31.0 | 504                    | 480 |
| 200.0           | 25.3                | 23.5 | 71.0      | 102.0 | 68.0         | 100.0 | 46.2     | 79.0  | 43.2       | 77.0  | 48.0       | 78.0 | 45.0          | 75.0 | 18.0             | 29.0 | 503                    | 479 |
| 250.0           | 28.5                | 28.2 | 70.0      | 102.0 | 67.0         | 100.0 | 41.5     | 74.0  | 38.5       | 72.0  | 46.0       | 75.0 | 43.0          | 70.0 | 17.3             | 28.0 | 502                    | 502 |
| 300.0           | 31.5                | 28.9 | 69.0      | 102.0 | 66.0         | 97.0  | 37.3     | 73.0  | 34.3       | 68.0  | 44.0       | 70.0 | 41.0          | 68.0 | 17.3             | 28.0 | 502                    | 478 |
| 350.0           | 34.3                | 31.5 | 68.0      | 100.0 | 65.0         | 97.0  | 33.6     | 69.0  | 30.6       | 66.0  | 43.0       | 70.0 | 40.0          | 63.0 | 17.3             | 28.0 | 502                    | 478 |
| 400.0           | 36.9                | 33.1 | 67.0      | 95.0  | 64.0         | 93.0  | 30.1     | 62.0  | 27.1       | 60.0  | 42.0       | 66.0 | 39.0          | 59.0 | 17.3             | 28.0 | 502                    | 478 |
| 550.0           | 44.1                | 40.2 | 65.0      | 95.0  | 62.0         | 93.0  | 20.8     | 55.0  | 17.8       | 53.0  | 39.0       | 60.0 | 36.0          | 56.0 | 17.3             | 28.0 | 502                    | 478 |
| 600.0           | 46.3                | 41.7 | 64.0      | 95.0  | 61.0         | 93.0  | 18.0     | 53.0  | 15.0       | 51.0  | 38.0       | 55.0 | 35.0          | 53.0 | 17.3             | 28.0 | 502                    | 478 |
| 800.0           | 54.5                | 47.6 | 62.0      | 90.0  | 59.0         | 87.0  | 7.9      | 42.0  | 4.9        | 39.0  | 36.0       | 47.0 | 33.0          | 44.0 | 16.1             | 28.0 | 501                    | 477 |
| 1000.0          | 62.0                | 54.5 | 61.0      | 85.0  | 58.0         | 83.0  | -1.0     | 31.0  | -4.0       | 29.0  | 34.0       | 40.0 | 31.0          | 38.0 | 15.5             | 27.0 | 501                    | 477 |
| 1200.0*         |                     | 59.8 |           | 80.0  |              | 77.0  |          | 20.0  |            | 17.0  |            | 35.0 |               | 33.0 |                  | 27.0 |                        | 477 |

\*Values below 4 MHz are for information only.

All performance based on 100 metres (328 ft.)

\*\*Values for IEC 61156-5 above 1000 MHz are for information only.

## Ordering Information:

| Part #             | Description                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------|
| 9T7L4-E10.....     | LSOH (IEC 60332-1), violet jacket, Class E <sub>ca</sub> , D <sub>ca</sub> , C <sub>ca</sub> *, 305m (1000 ft.)  |
| 9T7L4-E10-5CR..... | LSOH (IEC 60332-1), violet jacket, Class E <sub>ca</sub> , D <sub>ca</sub> , C <sub>ca</sub> *, 500m (1640 ft.)  |
| 9T7L4-E10-1KR..... | LSOH (IEC 60332-1), violet jacket, Class E <sub>ca</sub> , D <sub>ca</sub> , C <sub>ca</sub> *, 1000m (3281 ft.) |

\*Initial type test complete. System 1+ requirements pending

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

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