

# Everon® Copper Datacom U/UTP 450/23, Category 6, LSZH™/FRNC, Dca 4P, light Blue



**Part Number:**  
**XE004239861**

The Everon® Copper Datacom U/UTP 450/23 cable is designed up to 450MHz and its transmission characteristics exceed Category 6 specifications according to EN50288-6-1 IEC 61156-5. High system margins for the complete link according to the last version of ISO/IEC 11801 and EN 50173 (Series) will be achieved by using corresponding hardware together with this highend copper cable. The cable has a streamlined construction and low weight. Unshielded cable (U/UTP).

## Features and Benefits

U/UTP 450/23 cable designed up to 450 MHz

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Fulfils all requirements of category 6 EN50288-6-1 and IEC 61156-5

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Suitable for Classe D to E according to ISO/IEC 11801. EN50173 and 10 Gigabit Ethernet according to IEEE 802.3an

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Tested and approved for Power over Ethernet applications (PoE/PoE+/4PPoE) according to IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt up to 90W

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Low smoke and halogen-free (LSZH)

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Unshielded cable (U/UTP)

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Length marking on jacket

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Cca-s2,d2,a1

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CORNING

## Specifications

| General Specifications |                 |
|------------------------|-----------------|
| Environment            | Indoor          |
| Category               | 6               |
| Cable type             | U/UTP           |
| Halogen-free           | Yes             |
| Construction           | Simplex, 4P     |
| Reaction to fire       | Dca, s2, d2, a1 |
| Legacy Part Number     | VOL6UL4305      |
| Brand                  | Everon®         |

| Standards                |  |
|--------------------------|--|
| RoHS                     | Free of hazardous substances according to RoHS 2011/65/EU  |
| Approvals and Listings   | IEC 61156-5; EN 50288-6-1, ISO/IEC 11801 Ed. 2.2; EN 50173-1, ANSI/TIA-568-C-2; IEC 60304  |
| Design And Test Criteria | Tested and approved for Power over Ethernet applications (PoE/PoE+/4PPoE) according to IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt up to 90W |
| Flame propagation test   | IEC 60332-1  |
| Smoke density            | IEC 61034-2  |
| Halogen content test     | Zero Halogen to IEC 60754-1  |

| Environmental Conditions        |                 |
|---------------------------------|-----------------|
| Halogen-free                    | Yes             |
| Temperature range, installation | 0 °C to 50 °C   |
| Temperature range, operation    | -20 °C to 60 °C |

| Cable Design |                       |
|--------------|-----------------------|
| Conductor    | Copper Wire, AWG 23/1 |

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## Cable Design

|                       |                   |
|-----------------------|-------------------|
| Conductor insulation  | Solid PE          |
| Twisting              | 2 cores to a pair |
| Outer jacket material | LSZH/FRNC         |
| Outer jacket colour   | Light blue        |

## Mechanical Characteristics

|                               |            |
|-------------------------------|------------|
| Fire load                     | 602 MJ/km  |
| Nominal outer diameter        | 5.9 mm     |
| Min. bend radius installation | 8x Cable-Ø |
| Maximum tensile strength      | 100 N      |

## Electrical Characteristics

|   |  |
|---|--|
| Conductor resistance unbalance          | 2 %  |
| Delay skew                              | 40 ns/100 m                                      |
| Max. loop resistance                    | 190 Ω/km   |
| Propagation delay                       | 520 ns/100 m                                     |
| Voltage rating                          | Less than 75 V DC max and less than 50 V ACC max |
| Surface transfer impedance              | 30 mΩ  |
| Propagation velocity at >10 MHz (NVP*c) | 67 %   |
| Coupling attenuation                    | 40 dB  |
| Insulation Resistance                   | > 5000 MΩ*km                                     |

## Ordering Information

|                    |             |
|--------------------|-------------|
| Product Number     | XE004239861 |
| Cable length       | 500 m       |
| Packaging method   | Drum        |
| Units per delivery | 1/1         |

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| Electrical Characteristics                  |       |      |       |       |       |       |      |      |
|---|-------|------|-------|-------|-------|-------|------|------|
| Frequency [MHz]                             | 4     | 10   | 20    | 63    | 100   | 250   | 300  | 450  |
| Attenuation according to Standard [db/100m] | 3.83  | 6.0  | 8.53  | 15.48 | 19.92 | 33.02 |      |      |
| Typical attenuation [db/100m]               | 3.6   | 5.7  | 8.3   | 14.8  | 19.0  | 31.0  | 34.0 | 45.0 |
| NEXT according to Standard [db/100m]        | 66.27 | 60.3 | 55.78 | 48.36 | 45.3  | 39.33 |      |      |
| Typical NEXT Values [db/100m]               | 71.0  | 65.0 | 61.0  | 53.0  | 50.0  | 44.0  | 43.0 | 40.0 |
| ACR-N according to Standard [db/100m]       | 55.96 | 48.0 | 41.98 | 32.08 | 28.0  | 20.04 |      |      |
| Typical ACR-N Values [db/100m]              | 67.5  | 59.3 | 52.7  | 38.2  | 31.0  | 13.0  | 9.0  |      |



Corning Optical Communications GmbH & Co. KG • Leipziger Strasse 121 • 10117 Berlin, Germany  
 +00 800 2675 4641 • FAX: • [www.corning.com/opcomm/emea](http://www.corning.com/opcomm/emea)