# FutureCom™ S/FTP 550/23, blue Category 6A, 250 m

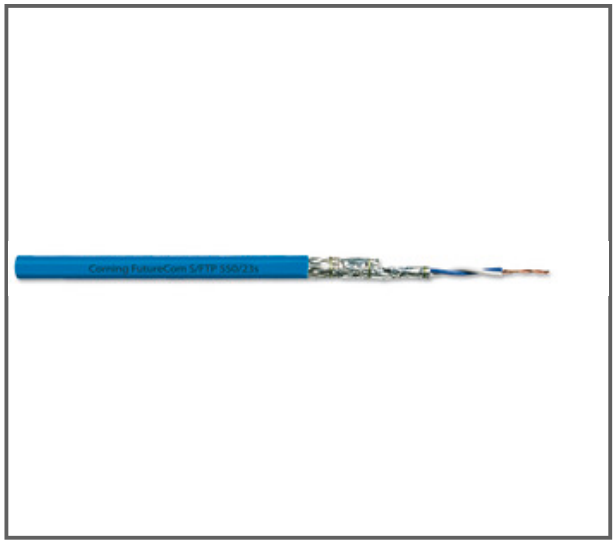
**Part Number:**
**CCXEDB-D0047-C001-X2**

The FutureCom™ S/FTP 550/23 cable is designed for applications up to 550 MHz and its transmission characteristics exceed Category 6A specifications according to EN 50288-10-1 and IEC 61156-5.

High system margins for the complete link according to ISO/IEC 11801 (Edition 2.2: 2011) and EN 50173 (Series) will be achieved by using corresponding hardware together with this high-end copper cable.

Due to the very low delay skew between the pairs these FutureCom cables are especially suitable for Gigabit Ethernet and also for transmission of digital data for future applications up to 10 Gigabit Ethernet according to IEEE 802.3an. The cable has a streamlined construction and low weight.

Each pair is individually foil shielded. The twisted pairs (PiMF) are also sheathed with a braid shield (S/FTP), which guarantees outstanding shielding characteristics. The cable satisfies Class B interference radiation standards according to EN 55022, as well as immunity according to EN 55024, which enables the realization of CE-compatible networks.



## Features and Benefits

S/FTP 550/23 cable specified up to 550 MHz

Fulfils all requirements of category 6A according to standards EN 50288-4-1 and IEC 61156-5

Ensures high system margins according ISO/IEC 11801 Ed.2.2 (2011) and EN 50173 series (2011)

Suitable for 10 Gigabit Ethernet according to IEEE 802.3an

Each twisted pair is individually shielded with a Al-laminated foil around each pair (PIMF) and a Copper braid, tinned

Flame retardant according to IEC 60332-1 and IEC 60332-3, EN 13501-6 and EN 50575 as well as non-corrosive according to IEC 60754-2 (NC)

Low smoke according to IEC 61034 and EN 50268; halogen-free (ZH/0H), no development of toxic gases in case of fire

Satisfies Class B interference radiation as well as immunity standards (EN 55022 and EN 55024)

Supports Power over Ethernet (PoE / PoE+/ PoE++) according IEEE 802.3bt

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## Specifications

| General Specifications | |
|---|---|
| Environment | Indoor |
| Category | 6A |
| Bandwidth | 550 MHz |
| Halogen-free | Yes |
| Product Category | Core Product / Fastship |
| Reaction to fire | Dca, s2, d2, a1 |
| Cable Type | S/FTP |

| Cable Design | |
|---|---|
| Conductor | Copper Wire, AWG 23 |
| Conductor Insulation | Halogen-free foam-skin material |
| Twisting | 2 cores to a pair |
| Pair screen | Al-laminated foil around each pair |
| Overall screen | Copper braid, tinned |
| Outer Jacket Material | LSZH™/FRNC |
| Outer Jacket Color | Blue |

| Mechanical Specifications | |
|---|---|
| Fire Load | 0.57 MJ/m |
| Nominal Outer Diameter | 7.2 mm |
| Min. Bend Radius Installation | 8x Cable-Ø (over flat side) |

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CORNING

| Mechanical Specifications | |
|---|---|
| Maximum Tensile Strength | 132 N |

| Electrical Characteristics | |
|---|---|
| Conductor resistance unbalance | 1 % |
| Delay skew | 9 ns/100 m |
| Max. loop resistance | 165 Ω/km |
| Propagation delay ≥10 MHz | 4.25 ns/m |
| Propagation Velocity at >10 MHz (NVP*c) | 79 % |
| Coupling Attenuation | 85 dB |
| Insulation Resistance | 5000 MΩ*km |
| Surface transfer impedance | 5 mΩ |

| Ordering Information | |
|---|---|
| Weight | 56 kg/km |
| Packing Type | Reelex Box |

| Standards | |
|---|---|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
| Flame Test Method | Flame retardant according to IEC 60332-1-2 (single cable), IEC 60332-3-24 (bunch of cables) Reaction to fire according to EN 50575 and EN 13501-6 |
| Level of corrosion | Non-corrosive according to IEC 60754-2 |

# FutureCom™ S/FTP 550/23, blue Category 6A, 250 m

CORNING

| Environmental Conditions | |
|---|---|
| Temperature Range, Installation | 0 °C - 50 °C (32 °F - 122 °F) |
| Temperature Range, Operation | -20 °C - 60 °C (-4 °F - 140 °F) |

| Electrical Characteristics | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Frequency [MHz] | 1 | 10 | 16 | 20 | 31 | 62 | 100 | 250 | 500 | 550 |
| Attenuation according to Standard [db/100m] | 2.1 | 5.9 | 7.5 | 8.4 | 10.5 | 15.0 | 19.1 | 31.1 | 45.3 | |
| Typical attenuation [db/100m] | 1.8 | 5.3 | 6.8 | 7.6 | 9.6 | 13.6 | 17.3 | 27.7 | 41.9 | 42.6 |
| NEXT according to Standard [db/100m] | 75.3 | 60.3 | 57.2 | 55.8 | 52.9 | 48.4 | 45.3 | 39.3 | 34.8 | |
| Typical NEXT Values | | | | | | 97.0 | 95.0 | 90.0 | 83.0 | 77.0 |
| ACR-N according to Standard [db/100m] | 73.2 | 54.4 | 49.8 | 47.4 | 42.4 | 33.4 | 26.2 | 8.3 | -10.4 | |
| Typical ACR-N Values [db/100m] | 98.2 | 94.7 | 93.2 | 92.4 | 90.4 | 83.4 | 77.7 | 62.3 | 41.1 | 34.4 |

RoHS COMPLIANT

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