

Data cable CobiNet 1000 CC SX, S/FTP Cat. 7 AWG 23 (before CobiLan 1000)

Application

- Installation data cable for the usage in structured cabling systems according to ISO/IEC 11801 and EN 50173 (2nd edition)
- Suitable for applications of class F, e.g. 10 Gigabit Ethernet (10G BASE-T) according to IEEE 802.3 an, VoIP, PoE/PoE+



Features and Design

- Cat. 7 according to EN 50288-4-1 and IEC 61156-5
- Suitable for PoE according to IEEE 802.3 af and PoE+ according to IEEE 802.3 at
- Bandwidth..... max. 1000 MHz
- Printing outer sheath
CobiNet CobiLan 1000, Cat. 7 ISO/IEC 11801 and 50173, S/FTP, 4x2xAWG23, P/N 9301 1030
§production lot code§ §meter marking§
- Colour.....RAL 6018 (green)
- 1000 m S/FTP installation cable per reel

(The length marking is not verifiable. The tolerance is +/- 1%. It is not provided for testing the specified and calculated in the delivery documentation actual delivery length)

Technical specifications

Climate area

- Thermal characteristics
 - Temperature range for fixed installation.....-20°C up to +60°C (-4°F to 140°)
 - Temperature range for mobile operation.....0°C up to +50°C (32°F to 122°)

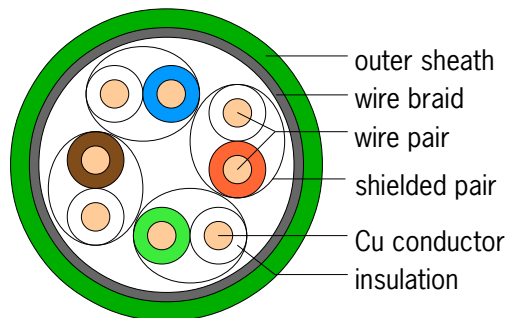
Chemical characteristics

- Conform to RoHS 2011/65/EU

Fire behavior

- Flame retardance.....according to IEC 60332-3-24
- Halogen acid gas emission.....according to IEC 60754-2
- Smoke density.....according to IEC 61034
- Calorific value (approx.).....0.63 MJ/m
- Classification of fire behaviour.....Dca, -s1, -d2
- Reference number of the Declaration of Performance.....CLD 17-07/01

Construction



- Conductor.....bare copper wire, AWG 23/1
- Insulation.....PE
- Twisting element.....pair
- Shielded pair.....aluminum-bonded polyester tape
- Twisting.....4 pairs
- Wire braid.....tinned copper
- Outer sheath.....halogen-free compound
- Colour code.....whbu/bu, whor/or, whgn/gn, whbn/bn
- Outer diameter.....7.5 ± 0.2 mm
- Copper content.....28 kg/km

Mechanical characteristics

- Bending radius
 - During installation.....8x overall diameter
 - After installation.....4x overall diameter
- Tensile strength.....max. 105 N
- Crush.....1000 N/100 mm
- Impact.....3 shocks

Electromechanical characteristics

- Transfer impedance at 10 MHz..... ≤ 10 mΩ/m
- Screening attenuation up to 1000 MHz..... > 75 dB
- Wire braid coverage..... 50%
- Separating class according to EN 50174-2..... C

Electrical characteristics at 20 °C

- Max. loop resistance..... 160 Ω/km
- Min. insulation resistance..... 5 GΩ x km
- Mutual capacitance (approx.)..... 45 nF/km
- Signal velocity (approx.)..... 0.78 c
- Propagation delay..... 425 ns/100 m
- Skew at 100 MHz..... ≤ 10 ns/100 m
- Characteristic impedance at 100 MHz..... 100±5 Ω
- Test voltage..... 700 V (RMS)

Transmission performance (typical values)

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	ACR (dB/100 m)	ELFEXT (dB/100 m)	Return Loss (dB)
1	1,8	103	101	95	25
4	3,4	103	100	93	28
10	5,5	103	97	92	30
16	6,8	102	95	91	32
20	7,6	102	94	90	34
31,25	9,8	100	90	86	35
62,5	14,0	100	86	82	34
100	17,6	100	82	77	33
200	25,0	95	70	70	29
300	30,9	93	62	67	27
500	39,9	87	47	62	24
600	44,6	85	40	60	23
900	56,4	81	25	53	21
1000	59,6	80	20	50	20

Norms

EN 50288-4-1 ; EN 50288-9-1 ; IEC 61156-5 ; IEC 61156-7 ; EN 50173 ; ISO/IEC 11801 2. Ausgabe
EN 60332-1-2 ; EN 60332-3-24 ; EN 61034 ; EN 50267 ; IEC 60754-2 ; IEC 61034