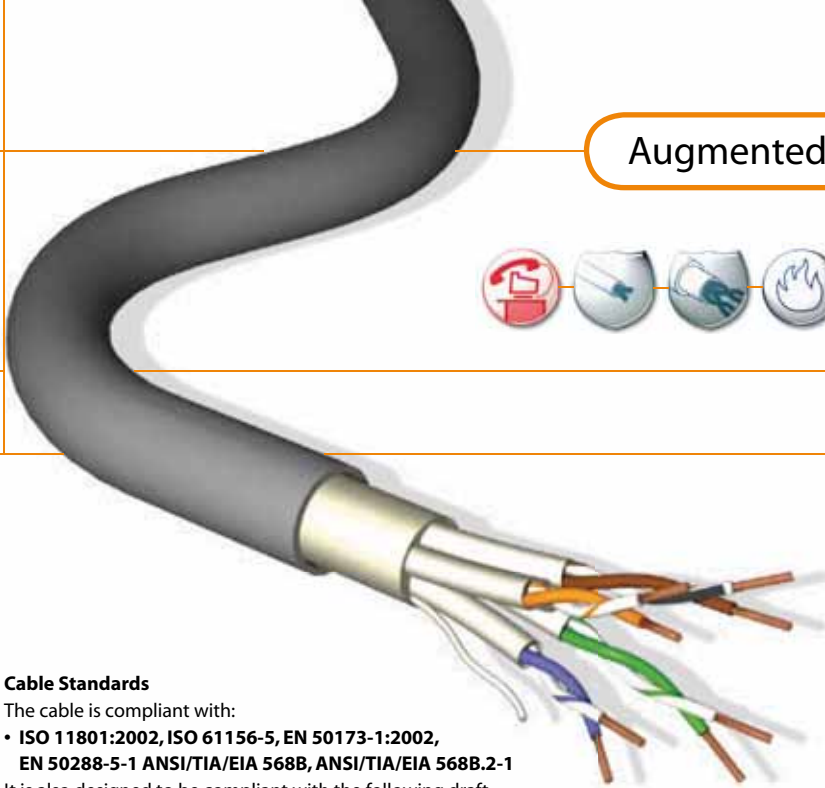


Augmented Category 6 Systems

10G PLUS



Cable Standards

The cable is compliant with:

- ISO 11801:2002, ISO 61156-5, EN 50173-1:2002, EN 50288-5-1 ANSI/TIA/EIA 568B, ANSI/TIA/EIA 568B.2-1

It is also designed to be compliant with the following draft standards when they are published:

- ISO 11801:2002 Amm1.1, ISO 61156-5 ed 2, EN 50173-1 ed2 EN 50288-10-1, ANSI/TIA/EIA 568B.2-10

Brand-Rex Copper Cables - 10GPlus

Communication Cable, F/FTP, 100 Ω, 4x2xAWG 23/1



Independent 3rd Party Certification (3P)

PRODUCT DESCRIPTION:

10GPlus F/FTP, 100 Ω, 4x2xAWG 23/1 is a premium grade Class EA / Augmented Category 6 cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone areas.

PRODUCT PERFORMANCE:

Core

Conductor: 23 AWG Plain Annealed Copper Wire

Insulation: Cellular Polyolefin

Diameter: 1.45mm Nominal

Pair: 2 of the above cores

Tape Screen: Individual pair wrapped with aluminium polyester tape, applied metal side out

Pair Colour: Blue-White, Orange-White, Green-White, Brown-White

Final Assembly

Cable: 4 of the above shielded pairs

Drainwire: 0.5mm Tinned Annealed Copper Wire

Tape Screen: Wrapped with aluminium polyester tape, applied metal side in

Sheath: PVC or LSZH compound

Mechanical and Environmental

Temp - Installation: 0°C to +50°C

Temp - Operation: -20°C to +75°C

Max Tensile Load:

10kg per simplex cable (installation)

Min Bend Radius:

8 x Outer Diameter (installation)

4 x Outer Diameter (operation)

Packaging

WRL 500m Wooden Reel

1000m Wooden Reel

Electrical Characteristics @ 20°C	Specification	Typical Performance
Conductor Loop Resistance	Max 19 Ω / 100m	14 Ω / 100m
Conductor Resistance Unbalance	Max 2%	0.5%
Dielectric Strength	1.0kV dc or 0.7kV ac for 1 min	100% in process test
Insulation Resistance	>500MΩ @ 100-500 V test voltage	>5 GΩ.km
Capacitance Unbalance to Earth	Max 120 pF/100m	80 pF/100m
Velocity of Propagation	<537.6 nsec/100m @ 100MHz	445 nsec/100m @ 100MHz (NVP for hand held testers = 0.74)
Skew	Max 20 nsec/100m @ 100MHz	5 nsec/100m @ 100MHz
Mean Characteristic Impedance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3 Ω @ 100MHz
Transfer Impedance	Max 100 mΩ/m @ 10MHz	25 mΩ/m @ 10MHz (ISO 61156 grade 1 cable)
Coupling Attenuation up to 1Ghz	Min 55 dB	75 dB

Characteristic	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)
Return Loss	5dB	5dB
Insertion Loss	6%	2%
NEXT	20dB	20dB
PSNEXT	20dB	20dB
ELFEXT	15dB	15dB
PSSELFEXT	15dB	15dB
PSANEXT	NA	10dB
PSAELFEXT	NA	10dB

Typical headroom on key S/N characteristics - for information only

	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)
PSACR @ 500MHz	NA	35dB
PSAACR* @ 500MHz	NA	20dB

* Power Sum Attenuation to Alien Crosstalk (near end) Ratio
The Alien crosstalk performance of cables is assessed using a '6 round 1' or '4 on a drum' method.

Product Part Numbering

Part Number	AC6F/FTP-HF1	AC6F/FTP-HF3
Outer Sheath	LSZH	LSZH
Construction	Simplex	Simplex
Cable Weight	50.1 kg/km	56.4 kg/km
Calorific Value	0.20 k Wh/m	0.21 k Wh/m
Outer Diameter (nom)	7.3mm	7.7mm
Sheath Colour	Violet RAL 4005	Blue RAL 5015
Fire Safety Rating	IEC 60332-1-2	IEC 60332-3-24
Acid Gas Emissions	IEC 60754-1	IEC 60754-1
Smoke Index	IEC 61034	IEC 61034
Packaging	WRL	WRL