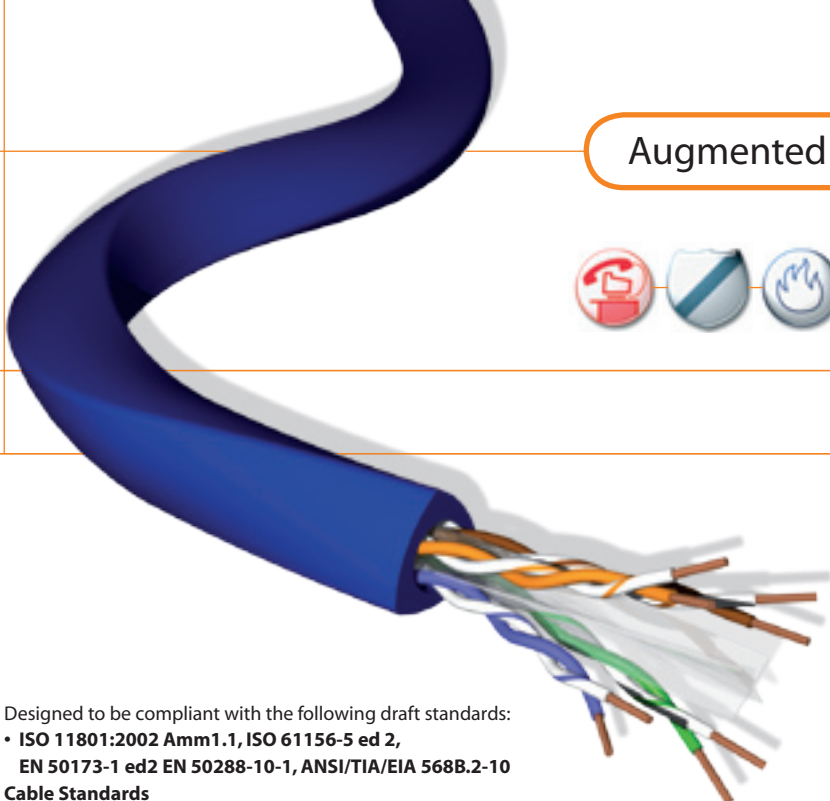


Augmented Category 6 Systems

10G PLUS



Designed to be compliant with the following draft standards:

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

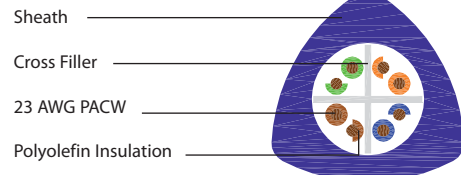
Cable Standards

The cable is backwards compatible with:

- ISO 11801:2002, ISO 61156-5, EN 50173-1:2002, EN 50288-6-1, ANSI/TIA/EIA 568B, ANSI/TIA/EIA 568B.2-1

Brand-Rex Copper Cables - 10GPlus

Communication Cable, U/UTP, 100 Ω, 4x2,AWG23/1



PRODUCT DESCRIPTION

10GPlus U/UTP, 100 Ohm, 4x2,AWG23/1 is a premium grade Class EA / Augmented Category 6 cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone applications.

PRODUCT PERFORMANCE

Core

Conductor: 23 AWG Plain Annealed Copper Wire

Insulation: Polyolefin

Diameter: 1.06mm Nominal

Pair: 2 of the above cores

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

Final Assembly

Cable: 4 of the above pairs cabled together around a cross filler

Sheath: PVC or LSZH compound

Mechanical and Environmental

Temp - Installation: 0C to 50C

Temp - Operation: -20C to 75C

Max Tensile Load: 10kg per cable

Min Bend Radius:

8 x Effective Diameter (installation)

Min Bend - Operation:

4 x Effective Diameter (operation)

Packaging

WRL 500m Wooden Reel 4 per Pallet
1000m Wooden Reel 2 per Pallet

Electrical Characteristics @ 20°C	Specification	Typical Performance
Conductor Loop Resistance	Max 19Ω / 100m	Max 19Ω / 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	>500 MΩ.km @ 100-500 V test voltage	>5 GΩ.km
Capacitance Unbalance to Earth	<120 pF/100m	40 pF/100m
Velocity of Propagation	<534 nsec/100m @ 100Mhz	<490 nsec/100m @ 100Mhz (NVP for hand testers = 0.67)
Skew	Max 40ns/100m @ 100Mhz	Max 30ns/100m @ 100Mhz
Mean Characteristic Impedance	100+/-5 Ω @ 100Mhz	100+/-5 Ω @ 100Mhz
Coupling Attenuation up to 1Ghz	Min 40dB	56dB

Characteristic	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)
Return Loss	5dB	5dB
Insertion Loss	6%	2%
NEXT	10dB	10dB
PSNEXT	10dB	20dB
ELFEXT	12dB	12dB
PSELFEXT	12dB	12dB
PSANEXT	NA	5dB
PSAELFEXT	NA	6dB

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

	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)
PSACR @ 500MHz	NA	0dB
PSAACR* @ 500MHz	NA	13dB

* 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.

Part Number	AC6U - HF1	AC6U - HF3
Outer Sheath	LSZH	LSZH
Construction	Simplex	Simplex
Cable Weight	79 kg/km	81 kg/km
Calorific Value	32 kJ/m	41 kJ/m
Effective Diameter	8.5mm	8.5mm
Sheath Colour	Voilet RAL 4005	Blue RAL 5015
Fire Safety Rating	IEC 60332 - Part 1	IEC 60332 - Part 3c
Acid Gas Emmissons	IEC 60754 - 1	IEC 60754 - 1
Smoke Index	IEC 61034	IEC 61034
Packaging Unit	WRL	WRL