

U/UTP

10G COPPER – U/UTP – CAT 6A SYSTEMS

Cable Standards

The cable is compliant with:

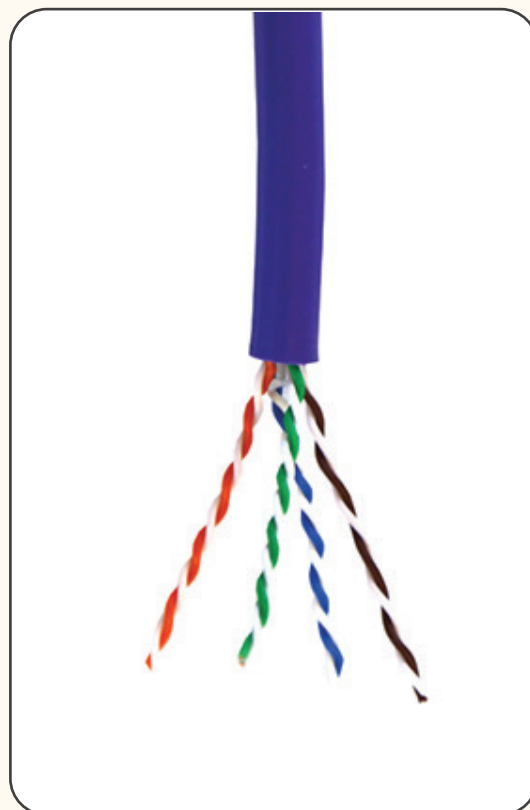
- ISO 61156-5 ed 2 and ANSI/TIA/EIA 568C

It is also designed to be compliant with en50288-10-1 standards when it is published:

These cables are also fully backwards compatible with Category 5 and Category 6 systems

Copperon Copper Cables – 10G Copper

Communication Cable, F/FtP, 100 Ω , 4x2xAWg 23/1



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 shielded pairs Tinned Annealed Copper Wire
- Sheath: LSHF 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)
- Halogen Free cable types (LSHF) meet leC 60754-1 and leC 61034

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.km @ 100-500 V test voltage	>5GΩ.km
Capacitance unbalance to earth	Max. 120 pF/100m	80 pF/100m
Velocity of Propagation	<537.6 nsec/100m @ 100mHz	417 nsec/100m @ 100mHz (nVP for hand held testers = 0.80)
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	30 mΩ/m @ 10mHz (ISO 61156 grade 2 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
PSELFEXT	15dB	15dB
PSANEXT	NA	10dB
PSAELFEXT	NA	10dB

Specifications may change without notice. Display Product Photos Shown are samples for viewing, not actual products.

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

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

AC6u/FtP-HF1-500Vt	500	LSHF	Violet	7.1	51	0.15	leC 60332-1-2
AC6u/FtP-HF1-1000Vt	1000	LSHF	Violet	7.1	51	0.15	leC 60332-1-2
AC6u/FtP-HF1-d500Vt	500	LSHF	Violet	14.3 x 7.1	102	0.32	leC 60332-1-2
AC6u/FtP-HF1-d1000Vt	1000	LSHF	Violet	14.3 x 7.1	102	0.32	leC 60332-1-2