



# Category 5e U/UTP PVC and LSZH Communications Cable

**Product Type:**

Data Cable

**Application:**

Concordia Category 5e U/UTP PVC and LSZH cables are designed to support horizontal networking applications over channel; distances up to 100 metres. The cable meets the specified performance for Category 5e U/UTP cables and supports all CLASS D applications as defined within ISO/IEC 11801 2<sup>nd</sup> Edition.

**Standards:**

- ISO/IEC 11801 2<sup>nd</sup> Edition
- TIA/EIA 568-C.2
- EN 50173, EN50288-3-1
- IEC 61156-5, IEC60332-1-2,
- For LSZH cables : IEC61034, IEC60754-2

**Construction:**

Conductor:	Solid plain annealed copper
Insulation:	Polyethylene
Cable:	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Sheath:	PVC, Grey LSZH : Violet
Diameter:	4.7mm

### Electrical properties at 20°C

Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC loop resistance	≤ 19.0Ω/100m
Resistance unbalance	≤ 2%
Capacitance unbalance to pair to earth	≤ 1600 pF/km
Nominal velocity of propagation	67%
Delay skew	≤ 45ns / 100m
Propagation delay @ 4MHz	≤ 552ns/100m
Test voltage (d.c. for 1 minute)	1000V
Conductor/Conductor & Conductor/Screen	
Insulation resistance (500V d.c)	≥ 5000MΩ.km

### Transmission line performance at 20°C

Frequency MHz	Attenuation dB/100m	NEXT dB	ACR dB/100m	PSNEXT dB	ELFEXT dB/100m	PSELFEXT dB/100m	Return Loss
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

### Mechanical Characteristics:

Temperature Range:	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C
Minimum bend radii:	
Installation	8 x Cable Diameter
Installed	4 x Cable Diameter
Maximum tensile force:	
During Installation	100N



**Fire Performance:**

Category 5e U/UTP PVC cables exceed the requirements of:

- IEC 60332-1

Category 5e U/UTP LSZH cables exceed the requirements of:

- IEC 60332-1
- IEC61034
- IEC 60754-2

**Other Relevant Information:**

- Pair colour code:
  - Pair 1: Orange and White/Orange
  - Pair 2: Blue and White/Blue
  - Pair 3: Brown and White/Brown
  - Pair 4: Green and White/Green

**Packaging:**

Part No.	Description	Packaging
CAT5ULCAVI305	Concord Cat5e U/UTP LSOH Violet	305m BOX
CAT5UPCAGY305	Concord Cat5e U/UTP PVC Grey	305m BOX