

# TruLAN Cat 6 UTP Duct Grade Technical Datasheet

Part No: C6D

**Description:** The TruLAN Cat 6 cable is the ideal choice for high speed data networks across a

home or building. Suitable for external applications and ducts.







**UV & WEATHER** 

## Construction

Conductor Bare Copper AWG 23(1)

Insulation Material High Density Polyethylene (HDPE)

Number of Pairs 4
Pair Identification TIA 568

Inner Sheath Material Polyvinyl Chloride (PVC), Grey

Outer Sheath Material Low Density Polyethylene (LDPE), Black

#### **Electrical Characteristics**

 $\begin{array}{lll} \text{Max. Conductor Resistance @ 20°C} & \leq 9.38 \ \Omega/100\text{m} \\ \text{Max. Resistance Unbalanced} & \leq 2.5 \ \% \\ \text{Nominal Impedance (1-100MHz)} & 100 \pm 15 \ \Omega \\ \text{Insulation Resistance} & 5000 \text{M}\Omega/\text{km} \\ \text{Mutual Capacitance} & \leq 5.6\text{nF}/100\text{m} \\ \text{Capacitance Unbalanced to Earth} & \leq 330 \ \text{pF}/100\text{m} \\ \text{NVP} & 68.5 \ \% \\ \text{Max. Delay Skew} & \leq 45 \ \text{nS}/100\text{m} \\ \end{array}$ 

Max. Delay Skew≤ 45 nS/ 100Voltage Rating EN 50525-1 $450/750V^*$ Test Voltage2.5kV (AC)

## **Physical Characteristics**

Overall Diameter  $8.6 \pm 0.3$ mm

Bend Radius Fixed  $4 \times OD$ , Flexing  $8 \times OD$ Temperature Rating Fixed  $-20 \, ^{\circ}\text{C}$  to  $70 \, ^{\circ}\text{C}$ , Flexing  $-10 \, ^{\circ}\text{C}$  to  $60 \, ^{\circ}\text{C}$ 

Weight 86 kg/km

### Transmission Performance

Transmission retromance														
Frequency	1	4	10	16	20	31.25	62.5	100	200	250	300	400	500	MHz
Attenuation	1.9	3.5	5.5	7.0	7.9	10.0	14.4	18.6	27.4	31.1	34	41.1	47.1	dB/100m
Return Loss	19.1	21.0	21.0	20.0	19.5	18.5	16.0	14.0	11.0	10.0	9.2	8.0	7.0	dB
NEXT	65.0	64.1	57.8	54.6	53.1	50.0	45.1	41.8	36.0	35.3	34.0	31.9	30.4	dB
PS NEXT	62.0	61.8	55.5	52.2	50.7	47.5	42.7	39.3	34.3	32.7	31.4	29.3	27.6	dB
ACRF	64.2	52.1	44.2	40.1	38.2	34.3	28.3	24.2	18.2	16.2	14.6	12.1	10.2	dB
PSACRF	61.2	49.1	41.2	37.1	35.2	31.3	25.3	21.2	15.2	13.2	11.6	9.1	7.2	dB

## Standards

RoHS2 Compliance Yes UV Resistance Good, ISO 4892-3†
CE Compliant LVD (2014/35/EU) Weather Resistance Good, ISO 4892-3†

Manufactured in accordance to TIA/EIA 568-C.2, ISO/IEC 11801

\*Suitable for installation where Band II 450/750v cables are present. Not suitable for connection to mains supply

†500 hour test duration, equivalent to 9-12 months of northern Europe climate.

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ISO 9001:2015 Certificate Number: DAS94272226/0/Q

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