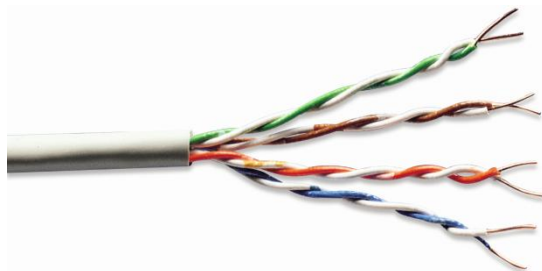


DIGITUS® CAT 5e, Class D, F-UTP Twisted Pair Installation Cable



Abstract

DIGITUS® CAT 5e, Class D, F-UTP installation cable, PVC, raw, paper box, AWG 24/1, color grey

Application areas:

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5: 16 MB; ISDN; FDDI; ATM

Norms:

ANSI/TIA-568-C
ISO/IEC 11801 2nd Ed.
EN 50173-1; EN 50288-2-1

Physical Properties:

Basic conductor	Solid AWG 24/1, bare annealed copper; Diameter 0.50 mm nominal
Insulation	PE (Polyethylene)
Total number of insulated conductors	8, twisted in 4 pairs
Color code	Blue-white, orange-white, green-white, brown-white
Individual pair shield	None
Overall shield	None
Outer jacket	PVC
Color	Grey
Outer jacketed diameter	6.1 ± 0.15 mm

Mechanical Properties:

Tensile loading	150 N max.
Dynamic bending radius	8x AD mm min.
Static bending radius	4x AD mm min.
Shipping- and storage temperature range	-20 °C up to +75 °C
Operating temperature range	-20 °C up to +60 °C
Installation temperature range	0 °C up to +50 °C

Electrical Properties:

DC loop resistance	$\leq 93.8\Omega \text{ km}$
Resistance unbalance	$\leq 2\%$
Insulation resistance (500V)	$\geq 2000M\Omega \cdot \text{km}$
Capacitance at 800 Hz	nom. 48 nF/km
Capacitance unbalance (pair to ground)	$\leq 1500 \text{ pF/km}$
Characteristics impedance (1-100 MHz)	$(100 \pm 15) \Omega$
Nominal velocity of propagation	approx. 65 %
Propagation delay	Nominal $\leq 535\text{ns}/100\text{m}$
Delay skew	Nominal $\leq 45\text{ns}/100\text{m}$
Test voltage (DC, 1min) core/core	1000 V
Coupling attenuation	$\geq 40 \text{ dB}$

Transmission Properties:

FREQ.	RL	Attenuation	NEXT	ACR	ELFEXT	PSNEXT	PSELFEXT
MHz	dB	dB	dB	dB/100 m	dB/100 m	dB/100 m	dB/100 m
1	17.0	2.03	62.30	60.30	60.75	62.30	60.75
4	18.80	4.04	53.26	49.20	48.71	53.26	48.71
8	19.70	5.76	48.75	43.00	42.69	48.75	42.69
10	20.00	6.46	47.30	40.80	40.75	47.30	40.75
16	20.00	8.24	44.30	36.10	36.67	44.30	36.67
20	20.00	9.26	42.78	33.20	34.73	42.78	34.73
25	19.30	10.41	41.33	30.90	32.79	41.33	32.79
31.25	18.60	11.72	39.87	28.20	30.86	39.87	30.86
62.5	16.50	16.99	35.36	18.40	24.83	35.36	24.83
100	15.10	21.97	32.29	10.30	20.75	32.29	20.75

Product Number Information

DK-1521-V-1	DIGITUS® CAT 5e F-UTP installation cable, raw, length 100 m, paper box, AWG 24/1, PVC, simplex, color grey
DK-1521-V-305	DIGITUS® CAT 5e F-UTP installation cable, raw, length 305 m, paper box, AWG 24/1, PVC, simplex, color grey