

Twisted Pair Patch Cable - Category 6_A Class E_A - S/FTP







Abstract

CAT 6_A Class E_A, S/FTP Twisted Pair Patch Cable, Cu, LSZH, DRAKA UC 900 SS, Hirose TM31, AWG 27/7

Features

- 2x RJ45 (8P8C) connectors; Hirose TM31
- Boots with kink protection, strain relief and latch protection
- Cable DRAKA UC 900 SS CAT 7 S/FTP PIMF
- Conductor: Cu (Copper)
- Shielding: S/FTP (complete braid shielding, pairs foil shielded)
- Structure: 4x 2 AWG 27/7, twisted pair
- Sheath: LSZHPoE+ ready

Product Overview

The Category 6_A Class E _A patch cables are manufactured and tested to the EN-50173-1;

EN-80288-4-2 and ISO/IEC 11801; IEC 61156-6 standard. They will guarantee the installed cabling system is compliant with the ISO & EN channel specification requirements and will provide optimum performance levels of Category 6_A cabling. The performance of the raw cable is tested up to 1000 MHz inclusive performance characteristics such as near end cross talk ("NEXT").

The patch cables are designed and produced to fulfill the highest requirements of various application areas in full volume.

Each cable is fitted with a molded boot which comes with kink protection and strain relief.

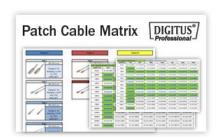
Furthermore the boot is equipped with a latch protection that prevents the latching lever against breaking. You can easily identify the Category 6_A , because of the transparent yellow colored connector.

Patch Cable Matrix and Configuration

Patch cables can be wide-ranging. Therefore we prepared a complete overview of our range, which guides you to the cable you require.

One E-Mail or one call will be enough and we will send you the latest version as a PDF file.

You can also check our Patch Cable Configuration tool on our website www.digitus-professional.com





Performance- and Specification Overview

Conductor Stranded AWG 27/7 bare copper, Ø 0.42 mm

Insulations FO-PE (Foamed Polyethylene)
Outer sheath LSZH (Low Smoke Zero Halogen)

Overall diameter 5.9 mm

Bending radius without tensile loading: ≥ 25 mm; with tensile loading: ≥ 50 mm

RJ45 connector Hirose TM31

Color code Orange x White, Green x White, Blue x White, Brown x White

Wiring standard EIA/TIA 568B

Pin assignment 1:1

Durability 750 insertion cycles

Loop resistance $\leq 340 \Omega / \text{km}$

Resistance unbalance ≤ 3%

 $Insulation resistance (500 V) ≥ 2000 MΩ*km \\ Capacity at 800 Hz Nom. 43 nF/km \\ Capacity unbalance (Pair/Earth) ≤ 1500 pF/km \\ Characteristic impedance (100 MHz) 100 ± 5 Ω \\ Propagation velocity ca. 79 % \\ Signal transit time ≤ 427 ns/100m \\ Duration difference ≤ 12 ns/100m \\$

Test voltage (DC, 1 min)

Conductor 1000 V

Coupling resistance at 1 MHz: $10m\Omega$ /m; at 10 MHz: $10m\Omega$ /m; at 30 MHz: $30m\Omega$ /m

Coupling attenuation 85 dB

Temperature range during operation: -20 °C up to +60 °C;

during installation: 0 °C up to +50 °C

Flame retardancy IEC 60332-1; IEC 60754-2

Smoke emission IEC 61034

Typical applications IEEE 802.3: 10BASE-T; 100BASE-T; 100BASE-T; 10GBASE-T Norms ISO/IEC 11801; EN-50173-1; ANSI/TIA 568-C; EN 50288-4-2

Colors Various colors available on request

Marking Brand name, cable length and cable information



Transmission Properties

Freq. (MHz)	Attenuation (dB/10m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	ACRF (dB/100M)	PS-ACRF (dB/100m)	Return loss (dB)
1.0	0.3	90	87	90	90	77	23
4.0	0.6	90	87	89	89	77	24
10.0	1.0	90	87	89	89	77	25
16.0	1.3	90	87	89	89	73	25
20.0	1.4	90	87	89	89	71	25
31.2	1.8	90	87	88	88	67	25
62.5	2.6	90	87	87	87	61	23
100.0	3.2	87	84	84	84	57	21
125.0	3.6	85	82	81	81	55	20
155.5	4.0	84	81	80	80	53	19
175.0	4.3	83	80	79	79	52	19
200.0	4.6	82	79	77	77	51	18
250.0	5.1	81	78	76	76	49	18
300.0	5.6	80	77	74	74	47	17
450.0	6.9	77	74	70	70	44	17
600.0	7.9	75	72	67	67	41	17
750.0	8.7	73	70	64	64	39	-
900.0	9.7	72	69	62	62	38	-
1000.0	10.2	71	68	41	61	37	-

Product Number Information

Item code	Description	Length	Color
DK-1643-A-005		0.5 m	
DK-1643-A-010		1.0 m	Grey
DK-1643-A-020	CAT 6 C FTD potch coble DDAVA UC 000 CC FDNC TM21	2.0 m	
DK-1643-A-030		3.0 m	
DK-1643-A-050	CAT 6 _A S-FTP patch cable DRAKA UC 900 SS FRNC,TM31	5.0 m	
DK-1643-A-100		10.0 m	
DK-1643-A-150		15.0 m	
DK-1643-A-200		20.0 m	