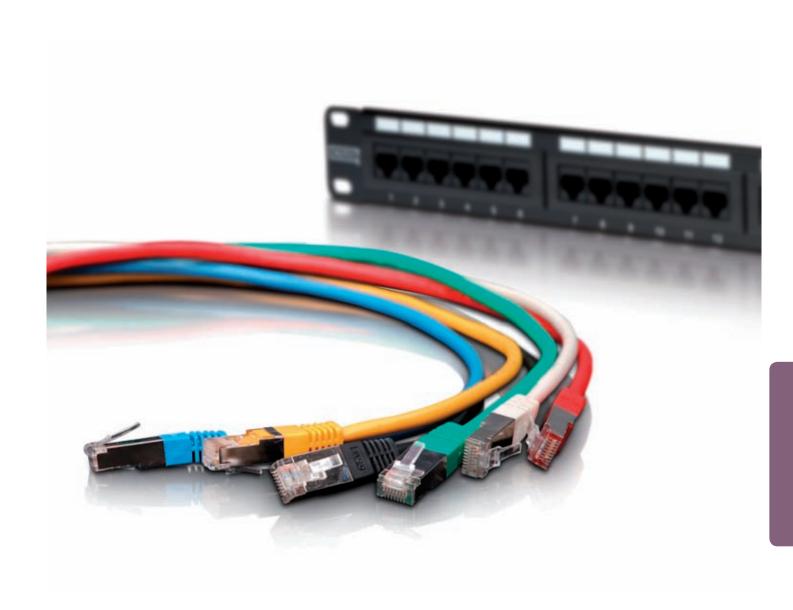
# **Copper components**



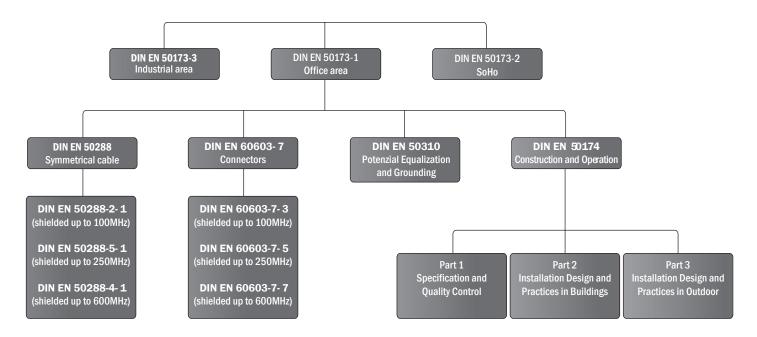
## The structured DIGITUS® cabling system

Different applications, data, speech and video-multimedia ran on different transmission paths in past. This meant multiple installations to do justice to the requirements. The development up to structured cabling has created uniform cabling in the building

that concentrates the various applications into one system. This cabling system must be independent from the manufacturer and the system so that the various applications. Categories and class can be met at any time.

CAT 6 Patch Cable	. 4:
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Installation Cable	
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Outlets	. 5
Patch Panel	. 5
Keystone Jack	. 6:

Tolless Keystone Jack	62
Coupler + Face Plates	64
19" Housing for Keystone Jacks	
Modular Plugs	
Modular Couplers	
19" IPC Housing	
SAS Connection cable	



#### **Cabling standards**

Various standards have been set down in international committees to be independent from manufacturer and system. These divide into various areas. The international range of validity is set down in ISI/IEC 11801 and in the national German standard of DIN EN 50173.

The standard series of EN 50173 is divided into five areas for various applications and covers "application-neutral communication cablings for information technology".

- EN 50173-1 General requirements
- EN 50173-2 Office buildings
- EN 50173-3 Industrially used buildings
- EN 50173-4 Private residential units
- EN 50173-5 Computing centres

There is also a difference in the individual components such as cables and connection technology and also in the installation of these components.

The individual components are classified into the following categories:

- · Category 5 up to 100 MHz
- Category 6 up to 250 MHz
- Category 6<sub>A</sub> up to 500 MHz
- Category 7 up to 600 MHz
- Category 7<sub>A</sub> up to 1000 MHz

A distinction is drawn between installed components according to transmission classes

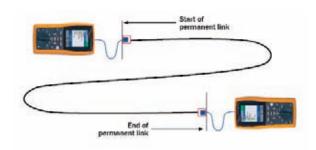
Class D up to 100 MHz
 Class E up to 250 MHz
 Class E<sub>A</sub> up to 500 MHz
 Class F up to 600 MHz
 Class F<sub>A</sub> up to 1000 MHz

Certification and checking of the limiting values for the measurement technology of the installed transmission routes.

A distinction is drawn between two models for the transmission routes for the cabling.

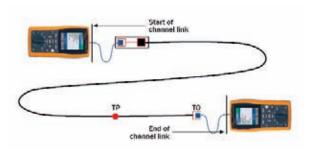
#### Permanent Link

which covers the laid installation cable and also the patch panel permanently connected to the end of the cable and the junction box.



#### Channel Link

Where the patch cable also used in the patch panel and the junction box can also be measured together with the components of the Permanent Link.



Defined electrical limiting values give a clear picture of the quality of the installed system.

- · Line length
- With return flow attenuation
- · Max. attenuation
- · Min. near end cross talk attenuation NEXT
- Min, OSNEXT
- Min. ACR
- Min. PSACR
- Min. ELFEXT
- Min. PSELFEXT
- Max. DC loop resistance
- Max. run time
- Max. run time difference

- The return flow attenuation is the measure for outstanding reflection of the transmission signal which is created by sud den increases in impedance in the cable run (Return Loss).
- The attenuation shows the lost part of the signal over the cable run (Attenuation).
- The near end cross talk attenuation is used as a measure of cross talk at the near end of the cable run. Each pair of strands will be measured at the other pairs respectively (Near end crosstalk NEXT).
- The far end cross talk attenuation is measured as the same way as NEXT (Far end crosstalk FEXT).
- ► ACR measures the ratio between cross talk and attenuation.
- ► (Attenuation to crosstalk ratio ACR=NEXT attenuation).
- ► Equal Level FEXT is the extent of crosstalk at the far end where the pair attenuation is deducted from this (ELFEXT).
- ► Run time of the signal over the transmission distance
- ► (Propagation delay).
- Run time differences arise with simultaneous transmission of a signal to various pairs (delay skew).
- ► Power Sum is the total of the faults which are coupled in from the remaining pairs to the fourth pair (PS).

- ► PSNEXT = Power Sum NEXT
- ► PSACR = Power Sum ACR
- ▶ PSELFEXT = Power Sum ELFEXT

#### Structure of the cabling system in accordance with EN 50173

Cabling takes place on different levels, not only storeys/floors are cabled but also different floors are cabled with each other and buildings are also cabled over outside surfaces. There different areas are defined for these applications.

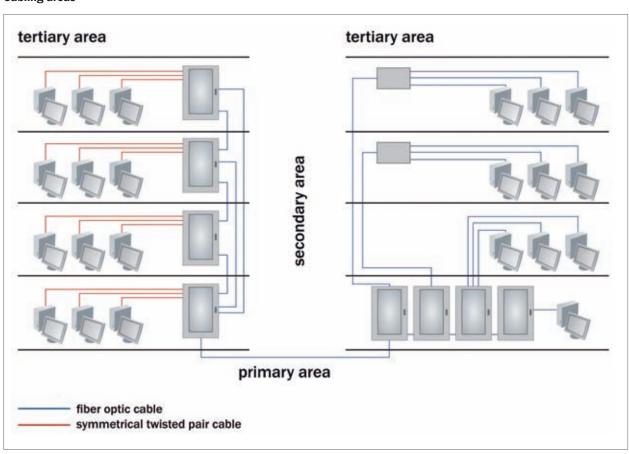
Primary cabling outside site areas, campus backbone Secondary cabling building area, building backbone cabling in floors, horizontal cabling

Basic standard specifications have been laid down in these cabling areas, as far as the execution of the entire cabling system is concerned.

At least one sub-distribution panel is planned for an office space of 1000m2. Such a sub distribution panel can also serve several floors in smaller buildings. The jacks should be distributed over the entire useable area where there have to be at least 2 connections for each workplace. One of the connections should be at least made with symmetric copper cable, the other one can be connected by using LWL cable.

The following minimum and maximum requirements are imposed on the lengths of cable for cabling in floors. The distance between the user end device and the distribution components, including all the patch cable used must not exceed 100 m.

#### Cabling areas



The length of the fixed cable between the jack and the patch panel is set at a maximum of 90 m here.

The maximum distance in the Permanent Link can also be shorter, since a consolidation point integrated into the cabling runs also has effects on the technical transmission values of the laid cable. Patch cables between jack and end device should not exceed a maximum length of 20 m: the length of patch cable used in the patch field at the floor sub-distribution cable has a maximum length of 5 m. Consolidation points which are used should be placed at least 15 m from the floor sub-distribution panel since plug-in connections used in the immediate vicinity can exert influences on various transmission parameters. The types of cable used in cabling on floors consist of 100 Ohm 4 paired twisted pair cables and 50/125µ multi-mode glass fiber cables.

The maximum cable length of the transmission run should be 2000m for the site and building cabling of the secondary area. The previously mentioned cable types are also preferred here. The often larger distances between buildings also offer an area of use for  $07/15\mu$  mono-mode glass fiber cable.

#### Connection technology for structured cabling

The cable which has been used for laying can be described with the following, different characteristics.

- Copper conductor consisting of solid copper for permanent installation between sub-distribution panels on floors and between distribution panels and jacks.
- Copper conductor as flexible conductor wire for use in the manufacture of patch cables.
- Details of the diameter and/or cross section in mm, mm2 or AWG (American Wire Gauge). The larger the wire diameter, the smaller the attenuation.

This section shows the following examples:

AWG 24/1 = conductor consisting of solid wire with 0.511 mm conductor diameter

AWG 26/7 = conductor consists of 7 wires with 0.48 mm conductor diameter

 Strands are twisted into pairs and provided with a colour code in the conductor insulation. The colour code is done according to EIA/TIA 568 / IEC 708-1 with the wiring:

Pair 1 = wire 1 in white/blue, wire 2 in blue

Pair 2 = wire 1 in white / orange, wire 2 in orange

Pair 3 = wire 1 in white / green, wire 2 in green

Pair 4 = wire 1 in white / brown, wire 2 in brown

 The screening is used to improve transmission safety. In accordance with the valid standard, it guarantees the limita tion of electromagnetic disturbances and also the immunity of the network against disturbances.

**UTP** completely unscreened, paired unscreened,

twisted cable

**F/UTP** completely foil screened, paired unscreened, twisted

cable

SF/UTP cable completely screened with foil and braid, paired

unscreened, twisted cable

**S/FTP** cable completely screened with braid, paired foil

screened twisted cable

 External cladding consisting of PVC or a halogen-free, fame resistant compound.

Halogen-free = no corrosive, or clearly less toxic gases and very low quantities of smoke

Flame resistant = self extinguishing after removal of the heat source, very limited propagation of fire

**FR** = flame retardant

**LS** = low smoke

**NC** = no corrosive fumes

**OH, ZH** = no halogen

The requirements for the patch panels and jacks are defined in DIN EN 50173-1. These products are divided into various classes in accordance with the performance class. Optimisation of the products allows panels and jacks to satisfy the requirements when a gigabit Ethernet is being operated. These have been set down in the standards DIN EN 50173-1:2000 with both types, category 3 up to 16 MHz and category 5 up to 100 MHz and also in EIN EN 50173:2002 with the types, category5 up to 100 MHz, category 6 up to 250 MHz and category 7 up to 600 MHz. The designation, category 5E which is generally used on the market corresponds to category 5 in accordance with DIN EN 50173-1:2000.

All the category 5 products certified according to standard can be used independently from their manufacturers in so-called "Mix & Match" systems. They are combined into a class D connection in the installation which has been created.

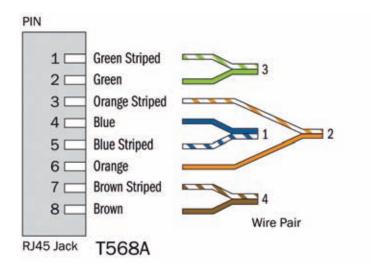
Class E products are characterized by the fact that each manufacturer has optimized his articles for his products with 250 MHz in order to satisfy the requirements of class E.

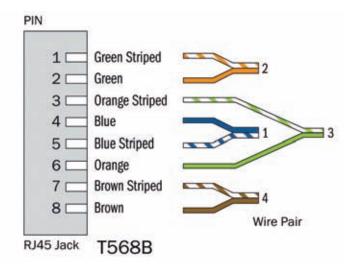
All the products are clearly defined and only "work" with each other according to certification. This means that "Mix & Match" is not possible. These products also do not comply with category 6 in accordance with DIN EN 50173-1:2002.

Category 6 products according to the new standard are only products which have been tested according to "De-Embedded Testing". This makes sure that the advantages reached by technical and mechanical improvements are used. Each category 6 jack with a RJ45 plug produces a category 6 connection according to standard.



"De-Embedded-Testing" - Logo

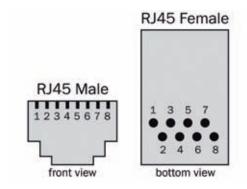




There is the option of using two configurations when cables are laid to patch panels and junction boxes and also when patch cables are being made. A distinction is made here according to colour code in accordance with EIA/TIA 568A or EIA/TIA 568B. The colour code used for the configuration is not important for the respective application, but has to be carried continuously throughout the complete system. Care also has to be taken when processing the patch cable to make sure that the paired twisting remains the same with the exception of the last 13 mm and that the possible pair screening is lead up to the LSA terminal rail.

Different applications run on the pairs  $\slash\,$  pins in the respective combination.

•	Ethernet	1-2, 3-6
•	Fast Ethernet	1-2, 3-6
•	Gigabit Ethernet	1-2. 3-6, 4-5, 7-8
•	10 Gigabit Ethernet	1-2. 3-6, 4-5, 7-8
•	ISDN	4-5, 3-6
•	Token Ring	4-5, 3-6
•	FDDI	1-2, 7-8
•	ATM	1-2, 7-8

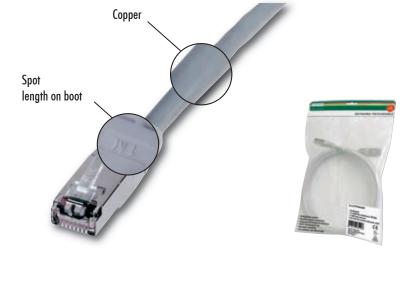




#### **DIGITUS® Premium CAT 6 S-FTP patch cable**

- Pairs with foil and full braid shilding (PIMF) patch cables
  • 4 x 2 x AWG 26/7, twisted pair, 100 Ohm
- 2 x RJ45 shielded connectors
- Boot with kink protection and strain relief

- Spot length on boot
   Connection 1 : 1
   Qualified for 1 Gbit Ethernet
- Ready for PoE











Please choose your requested product by the corresponding article number or the EAN code.

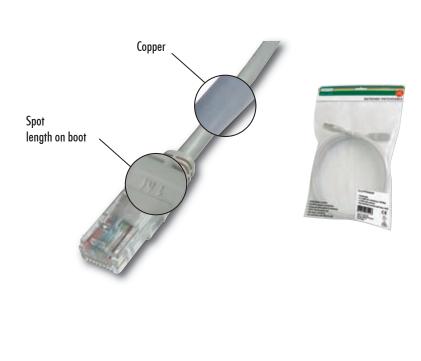
	grey	red	yellow	green	blue	black	crossover
0,5 m	DK-1641-005	DK-1641-005/R	DK-1641-005/Y	DK-1641-005/G	DK-1641-005/B	DK-1641-005/BL	DK-1641-005-CO
	214922	215059	215066	215042	214939	215035	215912
1,0 m	DK-1641-010	DK-1641-010/R	DK-1641-010/Y	DK-1641-010/G	DK-1641-010/B	DK-1641-010/BL	DK-1641-010-CO
	214946	215103	215110	215097	215073	215080	215929
2,0 m	DK-1641-020	DK-1641-020/R	DK-1641-020/Y	DK-1641-020/G	DK-1641-020/B	DK-1641-020/BL	DK-1641-020-CO
	214953	215165	215172	215158	215127	215141	215936
3,0 m	DK-1641-030	DK-1641-030/R	DK-1641-030/Y	DK-1641-030/G	DK-1641-030/B	DK-1641-030/BL	DK-1641-030-CO
	214960	215219	215226	215202	215189	215196	215943
5,0 m	DK-1641-050	DK-1641-050/R	DK-1641-050/Y	DK-1641-050/G	DK-1641-050/B	DK-1641-050/BL	DK-1641-050-CO
	214977	215264	215271	215257	215233	215240	215950
7,0 m	DK-1641-070	DK-1641-070/R	DK-1641-070/Y	DK-1641-070/G	DK-1641-070/B	DK-1641-070/BL	DK-1641-070-CO
	214984	215301	215318	215295	215288	215325	215967
10,0 m	DK-1641-100	DK-1641-100/R	DK-1641-100/Y	DK-1641-100/G	DK-1641-100/B	DK-1641-100/BL	DK-1641-100-CO
	214991	215363	215370	215356	215332	215349	215974
15,0 m	DK-1641-150						DK-1641-150-CO
	215004						215981
20,0 m	DK-1641-200						DK-1641-200-CO
	215011						215998
30,0 m	DK-1641-300						DK-1641-300-CO
	215028						216001

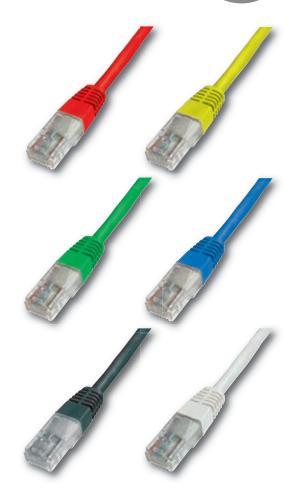
#### **DIGITUS® Premium CAT 6 U-UTP patch cable**

- Unshielded CAT 6 patch cables
   4 x 2 AWG 26/7, twisted pair, 100 Ohm
- 2 x RJ45 connectors
- Boot with kink protection and strain relief
- Spot with kink protection and
   Spot length on boot
   Qualified for 1 Gbit Ethernet
   Ready for PoE
   Connection 1: 1









Please choose your requested product by the corresponding article number or the EAN code.

	grey	red	yellow	green	blue	black	white	
0,5 m	DK-1611-005	DK-1611-005/R	DK-1611-005/Y	DK-1611-005/G	DK-1611-005/B	DK-1611-005/BL	DK-1611-005/WH	
	214205	214335	214359	214328	214304	214311	214342	
1,0 m	DK-1611-010	DK-1611-010/R	DK-1611-010/Y	DK-1611-010/G	DK-1611-010/B	DK-1611-010/BL	DK-1611-010/WH	
	214212	214380	214410	214373	214366	214403	214397	
2,0 m	DK-1611-020	DK-1611-020/R	DK-1611-020/Y	DK-1611-020/G	DK-1611-020/B	DK-1611-020/BL	DK-1611-020/WH	
	214229	214458	214472	214434	214427	214441	214465	
3,0 m	DK-1611-030	DK-1611-030/R	DK-1611-030/Y	DK-1611-030/G	DK-1611-030/B	DK-1611-030/BL	DK-1611-030/WH	
	214236	214519	214533	214502	214489	214496	214526	
5,0 m	DK-1611-050	DK-1611-050/R	DK-1611-050/Y	DK-1611-050/G	DK-1611-050/B	DK-1611-050/BL	DK-1611-050/WH	
	214243	214571	214595	214564 214540		214557	214588	
7,0 m	DK-1611-070	DK-1611-070/R	DK-1611-070/Y	DK-1611-070/G	DK-1611-070/B	DK-1611-070/BL	DK-1611-070/WH	
	214250	214632	214649	214625	214601	214618	214656	
10,0 m	DK-1611-100	DK-1611-100/R	DK-1611-100/Y	DK-1611-100/G	DK-1611-100/B	DK-1611-100/BL	DK-1611-100/WH	
	214267	214694	214717	214687	214663	214670	214700	
15,0 m	DK-1611-150							
	214274							
20,0 m	DK-1611-200							
	214281							
30,0 m	DK-1611-300							
	214298							



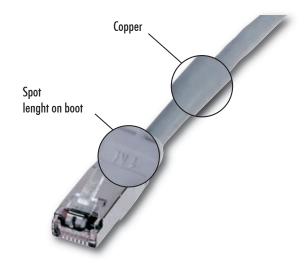
#### **DIGITUS® Premium CAT 5e SF-UTP patch cable**

- Foil and braid shielded CAT 5e patch cables
   4 x 2 AWG 26/7, twisted pair, 100 Ohm

- 2 x RJ45 connectors
  Boot with kink protection and strain relief
- Spot length on boot
- Qualified for 1 Gbit Ethernet
- Ready for PoE













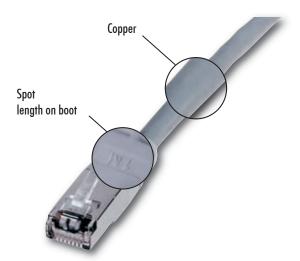
Please choose your requested product by the corresponding article number or the EAN code.

	grey	red	yellow	green	blue	black	CROSSOVER
0,5 m	DK-1531-005	DK-1531-005/R	DK-1531-005/Y	DK-1531-005/G	DK-1531-005/B	DK-1531-005/BL	DK-1531-005-CO
	212249	213734	213741	213727	213703	213710	215820
1,0 m	DK-1531-010	DK-1531-010/R	DK-1531-010/Y	DK-1531-010/G	DK-1531-010/B	DK-1531-010/BL	DK-1531-010-CO
	213079	213789	213796	213772	213758	213765	215905
2,0 m	DK-1531-020	DK-1531-020/R	DK-1531-020/Y	DK-1531-020/G	DK-1531-020/B	DK-1531-020/BL	DK-1531-020-CO
	213086	213833	213840	213819	213802	213826	215837
3,0 m	DK-1531-030	DK-1531-030/R	DK-1531-030/Y	DK-1531-030/G	DK-1531-030/B	DK-1531-030/BL	DK-1531-030-CO
	213093	213888	213895	213895 213864 213857 213871		213871	215844
5,0 m	DK-1531-050	DK-1531-050/R	DK-1531-050/Y	DK-1531-050/G	DK-1531-050/B	DK-1531-050/BL	DK-1531-050-CO
	213109	213932	213949	213925	213901	213918	215851
7,0 m	DK-1531-070	DK-1531-070/R	DK-1531-070/Y	DK-1531-070/G	DK-1531-070/B	DK-1531-070/BL	
	213116	213987	213994	213970	213956	213963	
10,0 m	DK-1531-100	DK-1531-100/R	DK-1531-100/Y	DK-1531-100/G	DK-1531-100/B	DK-1531-100/BL	DK-1531-100-CO
	213123	214038	214045	214021	214007	214014	215868
15,0 m	DK-1531-150	DK-1531-150/R	DK-1531-150/Y	DK-1531-150/G	DK-1531-150/B	DK-1531-150/BL	DK-1531-150-CO
	213130	214083	214090	214076	214052	214069	215875
20,0 m	DK-1531-200	DK-1531-200/R	DK-1531-200/Y	DK-1531-200/G	DK-1531-200/B	DK-1531-200/BL	DK-1531-200-CO
	213147	214137	214144	214120	214106	214113	215882
30,0 m	DK-1531-300	DK-1531-300/R	DK-1531-300/Y	DK-1531-300/G	DK-1531-300/B	DK-1531-300/BL	DK-1531-300-CO
	213154	214175	214182	214168	214151	214199	215899

#### **DIGITUS® Premium CAT 5e F-UTP patch cable**

- Foil shielded CAT 5e patch cables
  4 x 2 AWG 26/7, twisted pair, 100 Ohm
  2 x RJ45 shielded connectors
- Boot with kink protection and strain relief
   Spot length on boot
   Qualified for 1 Gbit Ethernet

- Ready for PoE

















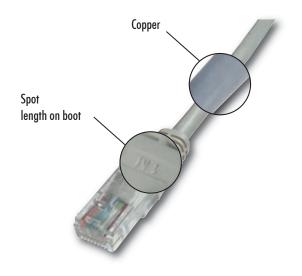
Please choose your requested product by the corresponding article number or the EAN code.

	grey	red	yellow	green	blue	black	crossover
0,3 m							DK-1521-003-CO 215721
0,5 m	DK-1521-005 212232	DK-1521-005/R 213192	DK-1521-005/Y 213208	DK-1521-005/G 213185	DK-1521-005/B 213161	DK-1521-005/BL 213178	DK-1521-005-CO 215738
1,0 m	<b>DK-1521-010</b> 212966	DK-1521-010/R 213246	DK-1521-010/Y 213253	DK-1521-010/G 213239	DK-1521-010/B 213215	DK-1521-010/BL 213222	DK-1521-010-CO 215745
2,0 m	<b>DK-1521-020</b> 212973	DK-1521-020/R 213291	DK-1521-020/Y 213307	DK-1521-020/G 213284	DK-1521-020/B 213260	DK-1521-020/BL 213277	DK-1521-020-CO 215752
3,0 m	<b>DK-1521-030</b> 212980	DK-1521-030/R 213345	DK-1521-030/Y 213352	DK-1521-030/G 213338	DK-1521-030/B 213314	DK-1521-030/BL 213321	DK-1521-030-CO 215769
5,0 m	<b>DK-1521-050</b> 212997	DK-1521-050/R 213390	DK-1521-050/Y 213406	DK-1521-050/G 213383	DK-1521-050/B 213369	DK-1521-050/BL 213376	DK-1521-050-CO 215776
7,0 m	DK-1521-070 213000			DK-1521-070/G			
10,0 m	<b>DK-1521-100</b> 213017	<b>DK-1521-100/R</b> 213499	DK-1521-100/Y 213505	<b>DK-1521-100/G</b> 213482	DK-1521-100/B 213468	DK-1521-100/BL 213475	DK-1521-100-CO 215783
15,0 m	DK-1521-150 213024	DK-1521-150/R 213543	DK-1521-150/Y 213550	<b>DK-1521-150/G</b> 213536	DK-1521-150/B 213512	DK-1521-150/BL 213529	DK-1521-150-CO 215790
20,0 m	DK-1521-200 213031	DK-1521-200/R 213598	DK-1521-200/Y 213604	DK-1521-200/G 213581	DK-1521-200/B 213567	DK-1521-200/BL 213574	DK-1521-200-CO 215806
30,0 m	DK-1521-300 213048						DK-1521-300-CO 215813
50,0 m	DK-1521-500 213055						



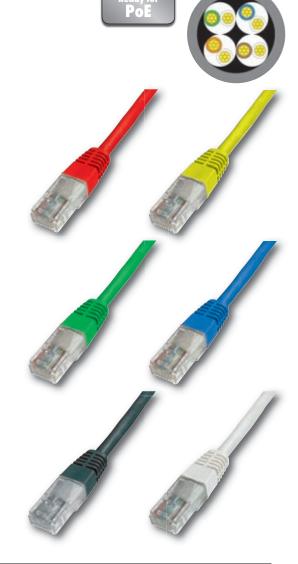
### **DIGITUS®** Premium CAT 5e U-UTP patch cable

- Unshielded CAT 5e patch cables
   4 x 2 AWG 26/7, twisted pair, 100 Ohm
- 2 x RJ45 connectors
  Boot with kink protection and strain relief
- Spot length on boot
- Connection 1 : 1
- Qualified for 1Gbit EthernetReady for PoE









Please choose your requested product by the corresponding article number or the EAN code.

	grey	red	yellow	green	blue	black	white
0,5 m	DK-1511-005	DK-1511-005/R	DK-1511-005/Y	DK-1511-005/G	DK-1511-005/B	DK-1511-005/BLACK	DK-1511-005/WH
	212119	212287	212300	212270	212126	212263	212294
1,0 m	DK-1511-010	DK-1511-010/R	DK-1511-010/Y	DK-1511-010/G	DK-1511-010/B	DK-1511-010/BLACK	DK-1511-010/WH
	212102	212348	212362	212324	212317	212331	212355
1,5 m	DK-1511-015	DK-1511-015/R	DK-1511-015/Y	DK-1511-015/G	DK-1511-015/B	DK-1511-015/BLACK	DK-1511-015/WH
	212133	212409	212423	212393	212379	212386	212416
2,0 m	DK-1511-020	DK-1511-020/R	DK-1511-020/Y	DK-1511-020/G	DK-1511-020/B	DK-1511-020/BLACK	DK-1511-020/WH
	212140	212454	212461	212447	212430	212485	212478
3,0 m	DK-1511-030	DK-1511-030/R	DK-1511-030/Y	DK-1511-030/G	DK-1511-030/B	DK-1511-030/BLACK	DK-1511-030/WH
	212157	212522	212546	212515	212492	212508	212539
5,0 m	DK-1511-050	DK-1511-050/R	DK-1511-050/Y	DK-1511-050/G	DK-1511-050/B	DK-1511-050/BLACK	DK-1511-050/WH
	212164	212584	212607	212577	212553	212560	212591
7,0 m	DK-1511-070	DK-1511-070/R	DK-1511-070/Y	DK-1511-070/G	DK-1511-070/B	DK-1511-070/BLACK	DK-1511-070/WH
	212171	212645	212669	212621	212614	212638	212652
10,0 m	DK-1511-100	DK-1511-100/R	DK-1511-100/Y	DK-1511-100/G	DK-1511-100/B	DK-1511-100/BLACK	DK-1511-100/WH
	212188	212706	212720	212690	212676	212683	212713
15,0 m	DK-1511-150	DK-1511-150/R	DK-1511-150/Y	DK-1511-150/G	DK-1511-150/B	DK-1511-150/BLACK	DK-1511-150/WH
	212195	212768	212775	212751	212737	212744	212782
20,0 m	DK-1511-200	DK-1511-200/R	DK-1511-200/Y	DK-1511-200/G	DK-1511-200/B	DK-1511-200/BLACK	DK-1511-200/WH
	212201	212829	212843	212812	212799	212805	212836
25,0 m	DK-1511-250						
	212218						
30,0 m	DK-1511-300	DK-1511-300/R	DK-1511-300/Y	DK-1511-300/G	DK-1511-300/B	DK-1511-300/BLACK	DK-1511-300/WH
	212225	212928	212935	212911	212904	212959	212942

#### **DIGITUS® CAT 7 Twisted Pair Installation Cable**

4x2xAWG23 S-FTP CAT 7 1000 MHz LSZH Data cable

Category 7 S/FTP indoor cable, conforming to ISO/IEC-11801 & IEC 61156-5. The cable contains 4 individually foil-shielded twisted pairs cabled together, overall shielded with a tinned-copper braid overall jacketed with LSOH compound  $\,$ for indoor use, conforming to IEC 60233-1.





Physical Description							
Basic Conductor	Solid 23AWG, bare annealed copper (0.57mm nom.)						
Insulation	SFS-PO.						
Total number of insulated conductors	8, twisted in 4 pairs.						
Color code	Blue x White, Orange x White, Green x White, Brown x White.						
Individual pair shield	Aluminum foil, providing 100% coverage, foil face out.						
Overall shield	Tin-coated copper wire braid, 35% nom. coverage.						
Drain wire	None.						
Outer jacket	Low-smoke, Zero-halogen, Flame-retardant compound for indoor use.						
Outer jacket thickness	0.6 mm nom.						
Color	Orange RAL 2000.						
Overall Diameter	7.5 mm nom.						
Surface Marking	DIGITUS® DK-1741-VH-5 4x2x23# S/FTP CATEGORY 7 SHIELDED LSOH CABLE VERIFIED to CAT 7 ISO/ IEC-11801 & IEC 61156-5 FR IEC 60332-1 CE 2002/95/EC (RoHS) [Meter Mark] METER [Batch Number]						

Mechanical Properties							
Bend Radius Dynamic: 8xD mm min. Static: 4xD mm min							
Storage Temperature	-20 to +75C						
Temperature installation range	0 to +50C						
Temperature operating range	-20 to +60C						
Flame Tests	IEC 60332-1 (Fire), IEC 60754 (gas) & IEC 61034 (smoke)						
Pulling force	150 N max.						
Caloric value	650 KJ/m						
Total Weight	68 Kg/Km nom.						

Electrical Properties @ 20C							
Mean Impedance	100±5 0hm @ 1-600 MHz						
Vp	75-77% nom.						
Capacitance	40 pF/m nom @ 1 KHz						
Capacitance unbalance to ground	1.6 pF/m max. @ 1 KHz						
Insulation Resistance	0.5 G0hm • Km min.						
DC Resistance	72 Ohm/Km max. (2% max. resistance unbalance).						
DC Loop Resistance	147 Ohm/Km max. (2% max. resistance unbalance).						
Voltage rating	72Vdc max.						
Coupling attenuation	85dB min @ 30-100 MHz. 85-20Log(f/100) dB min. @ 100-1000 MHz.						
PS-ANEXT Loss	92.5-15Log(f) dB min. @ 1-600 MHz (67dB max).						
PS-AACRF	78.2-20Log(f) dB min. @ 1-600 MHz (67dB max.)						
Phase delay	534+36/f <sup>½</sup> nS/100m max. @ f=1-1000 MHz.						
Delay Skew	25 nS/100m max.						

	Transmission Properties @ 20C															
FREQ.	Insertior	1 Loss	NEXT		PS N	EXT	EL F	EXT	PS EL	FEXT	R	L	TO	CL		EL-TCTL
MHz	dB/10	00m	dB		dl	В	dB/1	00m	dB/100m		d	В	d	В		dB
	Тур		Тур	Тур	Тур	Тур	Тур	Тур	Min	Тур	Min	Тур	Min	Тур	Min	Тур
10.00	5.5		98.0		95.0		95.0		91.6		26.0		40		15	
20.00	7,9		98.0		95.0		98.0		88.6		26.0		36		7.0	
62.50	14.5		98.0		95.0		86.0		82.6		26.0		32		NS	
100.00	18,5		98.0		95.0		82.0		78.6		24.0		30		NS	
200.00	29,6		88.0		85.0		70.0		66.6		22.0		27		NS	
300.00	32.8		87.0		84.0		67.0		63.6		21.0		NS		NS	
600.00	47.6		86.0		83.0		52.0		48.6		19.0		NS		NS	
900.00	60,4	55	80.0	86	77.0	84	48.0		44.6		18.0		NS		NS	
1000.00	64,8	59	78.0	83	75.0	81	47.0		44.6		18.0		NS		NS	

241324 / DK-1741-VH-5 500m drum, CAT 7 Twisted Pair Installation Cable

#### 247449 / DK-1741-VH-1

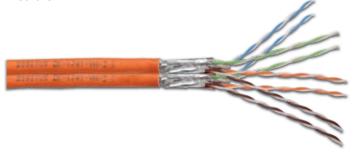
100m ring, CAT 7 Twisted Pair Installation Cable



#### **DIGITUS® CAT 7 Twisted Pair Installation Cable**

2x 4x2xAWG23 S-FTP CAT 7 1000 MHz LSZH installation cable

Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class F, 1000 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-4-1





Physical description			
Basic Conductor	solid AWG 23/1, bare annealed copper (0.57mm nom.)		
Insulation	SFS-PO		
Total number of insulated conductors	2x8, twisted in 2x4 pairs		
Color code	blue x white, orange x white, green x white, brown x white		
Individual pair shield	Aluminium foil, providing 100% coverage, foil face out		
Overall shield	in-coated copper wire braid, 35% nom. coverage		
Outer jacket	low-smoke, zero-halogen, flame retardant, non corrosive compound for indoor use		
Outer jacket thickness	0.6 mm nom.		
Color	orange RAL 2000.		
Overall diameter	16x7.5 mm nom.		
Copper (kg/km)	56		
Print	DIGITUS® DK-1741-VH-D-5 2x 4x2x23# S/FTP CATEGORY 7 SHIELDED LSOH CABLE VERIFIED to CAT 7 ISO/IEC-11801 & IEC 61156-5 FR IEC 60332-1 CE 2002/95/EC (RoHS) [Meter Mark] METER [Batch Number]		

Mechanical properties			
Bend radius	dynamic: 8xD mm min., static: 4xD mm min.		
Storage temperature	-20 to +75C		
Temperature installation range	0 to +50C		
Temperature operating range	-20 to +60C		
Flame tests	IEC 60332-1 (fire), IEC 60754 (gas) & IEC 61034 (smoke)		
Pulling force	150 N max.		
Caloric value	650 KJ/m		
Total weight	136 Kg/Km nom.		

Electrical properties		
Mean impedance	100±5 Ohm bei 1-600 MHz	
Vp	75-77% nom.	
Capacitance	40 pF/m nom bei 1 KHz	
Capacitance unbalance to ground	1.6 pF/m max. bei 1 KHz	
Insulation resistance	0.5 GOhm • Km min.	
DC resistance	72 Ohm/Km max. (2% max. resistance unbalance).	
DC loop resistance	147 Ohm/Km max. (2% max. resistance unbalance).	
Voltage resistance	72Vdc max.	
Coupling attenuation	85dB min bei 30-100 MHz. 85-20Log(f/100) dB min. at 100-1000 MHz.	
PS-ANEXT loss	92.5-15Log(f) dB min. at 1-600 MHz (67dB max).	
PS-AACRF	78.2-20Log(f) dB min. at 1-600 MHz (67dB max.)	
Phase delay	534+36/f <sup>½</sup> nS/100m max. bei f=1-1000 MHz.	
Delay skew	25 nS/100m max.	

Transferproperties									
FREQ.	Absorbabili	ty NEXT	PS NE	XT EL FI	EXT PS I	EL FEXT R	L TO	CL	EL-TCTL
MHz	dB/100m	dB	dB	dB/10	00m dB	/ <b>1</b> 00m d	B d	В	dB
	Тур	Тур	Тур	Тур	Тур	Тур	Тур	Тур	
10.00	5.5	98.0	95.0	95.0	91.6	26.0	40	15	
20.00	7,9	98.0	95.0	98.0	88.6	26.0	36	7.0	
62.50	14.5	98.0	95.0	86.0	82.6	26.0	32	NS	
100.00	18,5	98.0	95.0	82.0	78.6	24.0	30	NS	
200.00	29,6	88.0	85.0	70.0	66.6	22.0	27	NS	
300.00	32.8	87.0	84.0	67.0	63.6	21.0	NS	NS	
600.00	47.6	86.0	83.0	52.0	48.6	19.0	NS	NS	
900.00	60,4	80.0	77.0	48.0	44.6	18.0	NS	NS	
1000.00	64,8	78.0	75.0	47.0	44.6	18.0	NS	NS	

#### **DIGITUS® CAT 6 F-UTP Twisted Pair Installation Cable**

#### 4x2xAWG23 F-UTP CAT 6 250 MHz LSZH installation cable

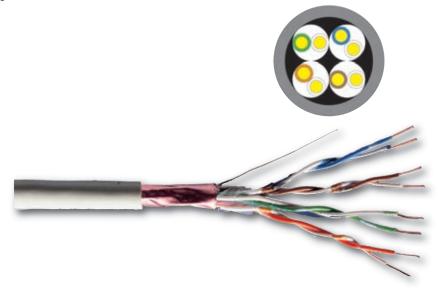
Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class E, 250 MHz. Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-5-1

#### Physical description

- Basic Conductor: solid AWG 23/1
- Insulation: PE
- $\bullet$  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: aluminium foil
- Outer jacket: halogenfree (LSZH)
- Color: orange

#### **Electrical properties**

- Mean impedance: 100 ± 5 0hm @ 1-250 MHz
   Vp: 65% nom.
- Delay skew: 20 nS/100m max.



	Installation cable
100m Drum	DK-1621-VH-1
	256205
500m Drum	DK-1621-VH-5
	251682

#### **DIGITUS® CAT 6 U-UTP Twisted Pair Installation Cable**

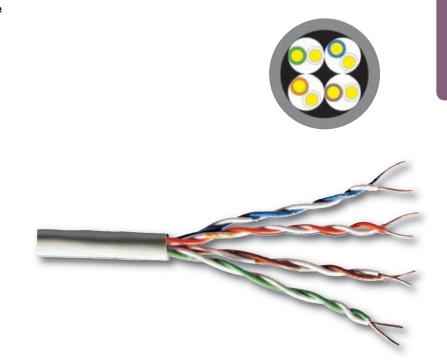
#### 4x2xAWG23 U-UTP CAT 6 250 MHz installation cable

Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class E, 250 MHz. Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-5-1

#### Physical description

- Basic Conductor: solid AWG 23/1
- Insulation: PE
- 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

- Mean impedance: 100±5 0hm @ 1-250 MHz
- Vp: 65% nom.
- Delay skew: 20 nS/100m max.



	Installation cable
100m Drum	DK-1611-V-1
	241225
305m Drum	DK-1611-V-305
	241232





#### **DIGITUS® CAT 5e SF-UTP LSOH twisted pair installation cable**

4x2xAWG24 SF-UTP CAT 5e 100 MHz LSZH installation cable

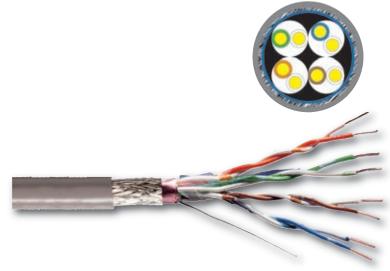
Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class E, 100 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-2-1

#### Physical description

- Basic Conductor: solid AWG 24/1
- Insulation: PE
- 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: aluminium foil and tin-coated copper wire braid
- Outer jacket: halogenfree (LSZH)
- Color: grey

#### **Electrical properties**

- Mean impedance:  $100 \pm 5$  Ohm @ 1-250 MHz
- Capacitance unbalance to ground: 1600pF/100m min.
- Insulation resistance: 0.5 GOhm Km min.
- DC loop resistance: 19 Ohm/100m max. (2% max. resistance unbalance)



	Installation cable
100m Drum	DK-1531-VH-1
	241201
500m Drum	DK-1531-VH-5
	241218

#### **DIGITUS® CAT 5e SF-UTP Twisted Pair Installation Cable**

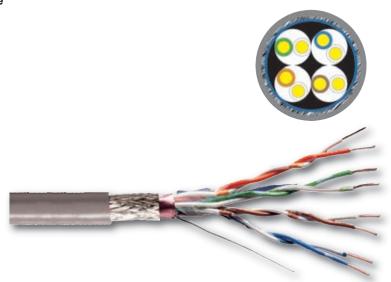
#### 4x2xAWG24 SF-UTP CAT 5e 100 MHz installation cable

Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class E, 100 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-2-1

#### Physical description

- Basic Conductor: solid AWG 24/1
- Insulation: PE
- 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: aluminium foil and tin-coated copper wire braid
- Outer jacket: PVC
- Color: grey

- Mean impedance: 100  $\pm$  5 Ohm @ 1-250 MHz
- $\bullet$  Capacitance unbalance to ground: 1600pF/100m min.
- Insulation resistance: 0.5 GOhm Km min.
- $\bullet$  DC loop resistance: 19 Ohm/100m max. (2% max. resistance unbalance)



	Installation cable
100m Drum	DK-1531-V-1 241157
305m Drum	DK-1531-V-305
	241164

#### **DIGITUS® CAT 5e F-UTP Twisted Pair Installation Cable**

#### 4x2xAWG24 F-UTP CAT 5e 100 MHz installation cable

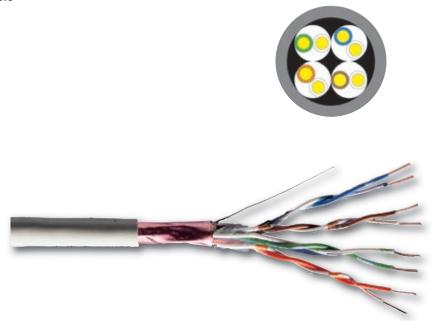
Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class D, 100 MHz. Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-2-1

#### Physical description

- Basic Conductor: solid AWG 24/1
- Insulation: PE
- 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: aluminium foil
- Outer jacket: PVC
- Color: grey

#### Electrical properties

- Mean impedance:  $100 \pm 5~\text{Ohm} @ 1-250~\text{MHz}$
- Capacitance unbalance to ground: 1600pF/100m min.
- Insulation resistance: 0.5 GOhm Km min.
- DC loop resistance: 19 Ohm/100m max. (2% max. resistance unbalance)



	Installation cable
100m Drum	DK-1521-V-1
	241119
305m Drum	DK-1521-V-305
	241126

#### **DIGITUS® CAT 5e U-UTP Twisted Pair Installation Cable**

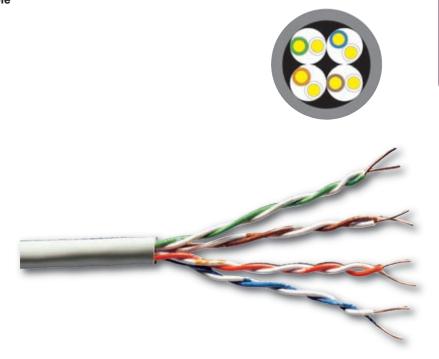
#### 4x2xAWG24 U-UTP CAT 5e 100 MHz installation cable

Suitable for building structured cabling in the secondary and tertiary area. For installation of cable lines of class E, 100 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-3-1

#### Physical description

- Basic Conductor: solid AWG 24/1
- Insulation: PE
- 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

- Mean impedance: 100±15 0hm @ 1-250 MHz
- $\bullet$  Capacitance unbalance: max. 300pF/100m @ 20°C
- Insulation resistance: 50 GOhm Km min.
- DC loop resistance: 125 Ohm/100m max.
- Mutual capacitance: 5600pF/100m max.



	Installation Cable
100m Drum	DK-1511-V-1
	241072
305m Drum	DK-1511-V-305
	241126





#### DIGITUS® CAT 6 S-FTP twisted pair patch cable

#### 4x2xAWG26 S-FTP CAT 6 250 MHz patch cable

Suitable for direct assembly of RJ45 plugs for the manufacture of patch cables. For installation of cable lines of class E, 250 MHz. Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-5-1

#### Physical description

- Basic Conductor: stranded AWG 26/7,
- Total number of insulated conductors: 8, twisted in 4 pairs
- Color code: blue x white, orange x white, green x white, brown x white
- Individual pair shield: Aluminium foil, providing 100% coverage
- Overall shield: tin-coated copper wire braid
- Outer jacket: low-smoke, zero-halogen, flame retardant, non corrosive compound for indoor use
- · Color: grey

#### Mechanical property

• Flame test: IEC 60332-1 (fire)

#### **Electrical properties**

- Mean impedance: 100±6 0hm @ 1-250 MHz
- Vp: 67% nom.
- Mutual capacitance: 55,8 nF/km max.
- Capacitance unbalance: 1.6 pF/m max.
- Insulation resistance: 0.5 GOhm \* Km min.
- DC loop resistance: 450 Ohm/Km max. (2% max. resistance unbalance)
- Phase delay: 5350 nS/km max.
- Delay skew: 40 nS/100m max.

	Patchcable
100m Ring	<b>DK-1641-PH-1</b> 131786
305m Pulloutbox	<b>DK-1641-PH-305</b> 131793



#### **DIGITUS® CAT 6 U-UTPtwisted pair patch cable**

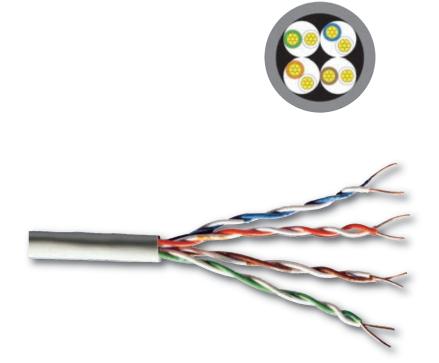
#### 4x2xAWG24 U-UTP CAT 6 250 MHz patch cable

Suitable for direct assembly of RJ45 plugs for the manufacture of patch cables. For installation of cable lines of class E , 250 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-6-2

#### Physical description

- Basic Conductor: stranded AWG 24/7,
- Total number of insulated conductors: 8, twisted in 4 pairs
- $\bullet\,$  Color code: blue x white, orange x white, green x white, brown x white
- Individual pair shield: none
- Overall shield: none
- Outer jacket: PVC
- Color: grey

- Mean impedance:  $100\pm6~\mathrm{Ohm}$  @ 1-250 MHz
- Vp: 67% nom.
- Mutual capacitance: 55,8 nF/km max.
- Capacitance unbalance: 1.6 pF/m max.
- $\bullet$  Insulation resistance: 0.5 GOhm \* Km min.
- DC loop resistance: 450 Ohm/Km max. (2% max. resistance unbalance)
- Phase delay: 5350 nS/km max.
- Delay skew: 40 nS/100m max.



	Patchcable
100m Ring	DK-1611-P-1
	131755
305m Pulloutbox	DK-1611-P-305
	131762

#### **DIGITUS® CAT 5e SF-UTP twisted pair patch cable**

#### 4x2xAWG26 SF-UTP CAT 5e 100 MHz patch cable

Suitable for direct assembly of RJ45 plugs for the manufacture of patch cables. For installation of cable lines of class D , 100 MHz. Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-2-2

#### Physical description

- Basic Conductor: stranded AWG 26/7
- Total number of insulated conductors: 8, twisted in 4 pairs
- $\bullet$  Color code: blue-white, orange-white, green-white, brown-white
- Individual pair shield: none
- Overall shield: aluminium foil and tin-coated copper wire braid
- Outer jacket: PVC
- Color: grey

#### **Electrical properties**

- Mean impedance: 100 ± 10 0hm @ 10-100 MHz
- Vp: 66% nom.
- Mutual capacitance: 55,8 nF/km max.
- Capacitance unbalance: 1.6 pF/m max.
- Insulation resistance: 0.5 GOhm \* Km min.
- DC loop resistance: 450 Ohm/Km max. (2% max. resistance unbalance)
- Phase delay: 5350 nS/km max.
- Delay skew: 40 nS/100m max.



	Patchcable
100m Ring	DK-1531-P-1
	202288
305m Pulloutbox	DK-1531-P-305
	202295

#### **DIGITUS® CAT 5e F-UTP twisted pair patch cable**

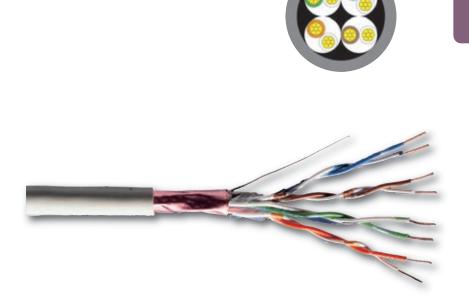
#### 4x2xAWG26 F-UTP CAT 5e 100 MHz patch cable

Suitable for direct assembly of RJ45 plugs for the manufacture of patch cables. For installation of cable lines of class D , 100 MHz.
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-2-2

#### Physical description

- Basic Conductor: stranded AWG 26/7
- 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: aluminium foil
- Outer jacket: PVC
- Color: grey

- Mean impedance:  $100\pm10~\text{Ohm}$  @ 10-100~MHz
- Vp: 66% nom.
- Mutual capacitance: 55,8 nF/km max.
- $\bullet$  Capacitance unbalance: 1.6 pF/m max.
- $\bullet$  Insulation resistance: 0.5 GOhm \* Km min.
- DC loop resistance: 450 Ohm/Km max. (2% max. resistance unbalance)
- Phase delay: 5350 nS/km max.
- Delay skew: 40 nS/100m max.



	Patchcable
100m Ring	DK-1521-P-1 186434
305m Pulloutbox	DK-1521-P-305 202271



#### DIGITUS® CAT 5e U-UTP twisted pair patch cable

#### 4x2xAWG24 U-UTP CAT 5e 100 MHz patch cable

Suitable for direct assembly of RJ45 plugs for the manufacture of patch cables. For installation of cable lines of class D , 100 MHz.

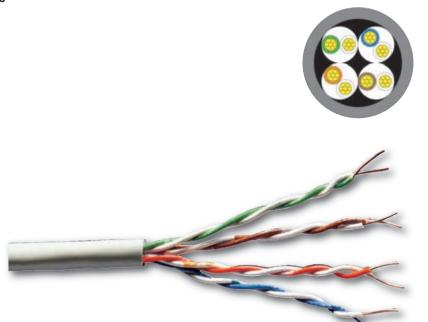
Conforming to ISO/IEC 11801, DIN EN 50173, DIN EN 50288-3-2

#### Physical description

- Basic Conductor: stranded AWG 24/7
- $\bullet$  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

#### **Electrical properties**

- Mean impedance:  $100 \pm 10$  Ohm @ 10-100 MHz
- Vp: 66% nom.
- Mutual capacitance: 55,8 nF/km max.
- Capacitance unbalance: 1.6 pF/m max.
- Insulation resistance: 0.5 GOhm \* Km min.
- DC loop resistance: 450 Ohm/Km max. (2% max. resistance unbalance)
- Phase delay: 5350 nS/km max.
- Delay skew: 40 nS/100m max.



	Patchcable
100m Ring	DK-1511-P-1
	202233
305m Pulloutbox	DK-1511-P-305
	202257



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## DIGITUS® CAT 6 De Embedded certified wall outlet, design compatible, flush mounted

- According to Link Performance Class E, 1 Gbit Ethernet
- CAT6 De Embedded certified
- Up to 250 MHz
- Design compatible with common switch programmes
- Shielded 2 x RJ45 sockets, 8P8C, strain relieving 40° socket angle with dust cover
- Integrated installation cable strain relief
- Shielded RJ45 sockets due to enclosed metal die cast housing
- Flush mount ready (with surface mountbox)
- Cable installation via LSA strips, color codes based on EIA/TIA 568 A & B
- · Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



design compatible



#### 241409 / DN-9005-KL-N

C AT 6 Outlet, fl ush mount

# DIGITUS® CAT 6 De Embedded wall outlet, design compatible, surface mounted

- According to Link Performance Class E, 1Gbit Ethernet
- CAT6 De Embedded certified
- Design compatible with common switch programmes
- Shielded 2 x RJ45 sockets, 8P8C, strain relieving 40°socket angle with dust cover
- Integrated installation cable strain relief
- Shielded RJ45 sockets due to enclosed metal die cast housing
- Flush mount ready
- Cable installation via LSA strips, color codes based on EIA/TIA 568 A & B
- Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



design compatible



#### 241416 / DN-9006-KL-N

Cat6 Outlet, surface mount

#### **DIGITUS® Class E CAT 6 wall outlet, flush mounted**

- According to link performance Class E, 1Gbit Ethernet
- Up to 250 MHz
- $\bullet\,$  Shielded 2 x RJ45 sockets, 8P8C, strain relieving 40°socket angle
- Integrated installation cable strain relief
- Shielded RJ45 sockets due to enclosed metal die cast housing
- Flush / surface mount ready (with surface mountbox)
   Cally in the last control of the co
- $\bullet$  Cable installation via LSA strips, color codes based on EIA/TIA 568 A & B
- Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



Class E CAT 6 tested

Channel Link certifi ed

#### 175711 / DN-9005-N

Class E CAT 6 Outlet, fl ush mount

#### 175759 / DN-9005/B5-N

Class E CAT 6 Outlet, Flush mount, 5 pcs.



#### DIGITUS® Class E CAT 6 modular wall outlet, surface mounted

- · According to link performance Class E, 1Gbit Ethernet
- Up to 250 MHz
- Shielded RJ45 sockets, 8P8C, strain relieving 40° socket angle
- Integrated installation cable strain relief
- Shielded RJ45 sockets due to enclosed metal die cast housing
- · Flush mount ready
- $\bullet$  Cable installation via LSA strips, colour codes based on EIA/TIA 568 A & B
- · Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



Class E CAT 6 tested

Channel Link certifi ed

#### 175735 / DN-9006-N

Class E CAT 6 wall outlet, surface mounted

#### 175742 / DN-9006/B5-N

Class E CAT 6 wall outlet, surface mounted, 5 pcs.

#### **DIGITUS® CAT 5e wall outlets, surface mounted**

- CAT 5e, EIA TIA 568 and ISO IEC 11801 / EN 50173, 1Gbit Ethernet
- Up to 100 MHz
- $\bullet$  Shielded 2 x RJ45 sockets, 8P8C, strain relieving 40° socket angle
- Integrated installation cable strain relief
- Metal die cast housing
- Flush / surface mount ready (with surface mountbox)
- Cable installation via LSA strips, color codes based on EIA/TIA 568 A & B
- · Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



#### 175650 / DN-9001-N

Cat5e outlet, fl ush mounted

#### 175704 / DN-9001/B5-N

Cat5e outlet, fl ush mounted, 5 pcs.

## DIGITUS® CAT 5e Wall Outlet, CAT 5e surface mounted

- CAT5e EIA TIA 568 and ISO IEC 11801 / EN 50173, 1Gbit Ethernet
- Up to 100 MHz
- Shielded RJ 45 sockets 8P8C, strain relieving 45° socket angle
- Integrated installation cable strain relief
- · Shielding from enclosed metal die cast housing
- · Flush mount ready
- Cable installation via LSA strips, colour codes based on EIA/TIA 568 A & B
- Horizontal cable entry
- Cover frame 80x80, incl. central frame 50x50 according to DIN 49075
- Color white RAL 9010



#### 175681 / DN-9002-N

Cat5e wall outlet, surface mounted

#### 175698 / DN-9002/B5-N

Cat5e wall outlet, surface mounted, 5 pcs.

#### DIGITUS® CAT 6 19" patch panel, De Embedded certified

- According to Link Performance Class E, 1Gbit Ethernet
- Cat 6 De Embedded certified
- Up to 250 Mhz
- Housing of steel sheet, grey color RAL 7035
- Shielded RJ45 female sockets, 8P8C with dust cover
- Cable installation via LSA strips, colour-coded to EIA/TIA 568 A & B
- Fixing option for cable ties
- Central ground connection
- shuttered RJ45 Jacks
- 10
- Grey RAL 7035





## **241621 / DN-91624S-KL** CAT6, 19" Patch Panel, 24 port

#### **DIGITUS® Class E CAT 6 19" patch panel**

- Class E up to 250 MHz
- 1Gbit Ethernet
- Housing of steel sheet, grey color RAL 7035
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, colour-coded EIA/TIA 568B
- Fixing option for cable ties, central ground connection
- Central ground connection
- 1U



#### 241607 / DN-91616S

Class E CAT6 Patch Panel 16-Port, 1U

#### 241614 / DN-91624S

Class E CAT6 Patch Panel 24-Port, 1U



#### DIGITUS® CAT 5e 19" patch panel

- CAT5e up to 100Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- Housing of sheet steel
- Grey RAL 7035
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color-coded to EIA/TIA 568 B
- Fixing option for cable ties
- Central ground connection
- 1U



#### 241522 / DN-91524S

24-port, 19" CAT 5e patch panel

#### 241515 / DN-91516S

16-port, 19" CAT 5e patch panel

#### DIGITUS® Class E CAT 6 19" patch panel, unshielded

- Class E CAT6, up to 250 MHz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- Black RAL 9005
- Unshielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, colour-coded as per EIA/TIA 568 B
- 1U





#### 241546 / DN-91616U

Class E CAT 6 patch panel, 16-port, unshielded, 19"

#### 241553 / DN-91624U

Class E CAT 6 patch panel , 24-port, unshielded, 19"

#### 241560 / DN-91648U

Class E CAT 6 patch panel , 48-port, unshielded, 19"

#### DIGITUS® CAT 5e 19" patch panel, unshielded

- CAT 5e, up to 100Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- Black RAL 9005
- Unshielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, colour-coded as per EIA/TIA 568 B
- 1U





#### 241454 / DN-91516U

CAT 5e patch panel, 16-port, 1U, unshielded

#### 241461 / DN-91524U

CAT 5e patch panel, 24-port, 1U, unshielded

#### 241478 / DN-91548U

CAT 5e patch panel, 48-port, 2U, unshielded

#### **DIGITUS® Class E CAT 6 10" patch panel**

- Class E CAT 6, up to 250Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- · Housing of sheet steel
- Black RAL9005
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color coded to EIA/TIA 568 B
- Fixing option for cable ties
- Central ground connection
- 1U



#### 241591 / DN-91612S

12-port, shielded, 10"

#### 241577 / DN-91608S

8-port, shielded, 10"

#### **DIGITUS® Class E CAT 6 dekstop patch panel**

- Class E CAT 6, up to 250Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- · Housing of sheet steel
- Black RAL9005
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color coded to EIA/TIA 568 B
- Fixing option for cable ties
- Central ground connection
   1U



#### 241584 / DN-91608SD

8-port, shielded, Desktop version

#### **DIGITUS® CAT 5e desktop patch panel**

- CAT5e, up to 100Mhz, ISO/IEC 11801, EN50173
- 1 Gbit Ethernet
- · Housing of sheet steel
- Black RAL9005
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color coded to EIA/TIA 568 B
- Fixing option for cable ties
- Central ground connection
- 1U





#### **DIGITUS® CAT 5e 10" patch panel**

- CAT 5e, up to 100Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- · Housing of sheet steel
- Black RAL 9005
- Shielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color-coded to EIA/TIA 568 B
- Fixing option for cable ties
- Central ground connection
- 1U



#### 241508 / DN-91512S

10" CAT 5e patch panel ,12-port, shielded

#### 241485 / DN-91508S

10" CAT 5e patch panel , 8-port, shielded

#### DIGITUS® CAT 5e 10" patch panel, unshielded

- CAT 5e, up to 100Mhz, ISO IEC 11801, EN 50173
- 1 Gbit Ethernet
- Black RAL 9005
- Unshielded RJ45 female sockets, 8P8C
- Cable installation via LSA strips, color-coded to EIA/TIA 568 B
- 1U



#### 241430 / DN-91508U

10" CAT 5e patch panel , 8-port, unshielded

#### 241447 / DN-91512U

10" CAT 5e patch panel , 12-port, unshielded

#### **DIGITUS® CAT 3 19" ISDN patch panel**

- CAT 3
- Grey RAL 7035
- Unshielded RJ45 female sockets, 8P8C
- Cable instalation via LSA strips
- 1U



CAT 3 ISDN patch panel , 25-port

#### 241652 / DN-91350

CAT 3 ISDN patch panel , 50-port

## DIGITUS® Class E CAT 6 Keystone Jack, shielded



- Link Performance Class E, up to 250 MHz, EN 50173, ISO/IEC 11801
- Cable installation via LSA stripes, color coded according to EIA/TIA 568 A &~B
- 1Gbit Ethernet
- RJ45 female for patch panel installation

## **245117 / DN-93611** shielded

### **DIGITUS® CAT 5e Keystone Jack, shielded**



- Tested for Link Performance CAT 5e
- Cable installation via LSA stripes, color-coded as per EIA/TIA 568 A & B
- RJ 45 female for patch panel installation

# DIGITUS® Class E CAT 6 Keystone Jack, unshielded



- Link Performance Class E, up to 250 MHz, EN 50173, ISO/IEC 11801
- Cable installation via LSA stripes, color coded according to EIA/TIA 568 A &~B
- 1Gbit Ethernet
- RJ45 female for patch panel installation

245100 / DN-93601

unshielded

#### **DIGITUS® CAT 5e Keystone Jack, unshielded**



- Tested for Link Performance CAT 5e
- Cable installation via LSA stripes, color-coded as per EIA/TIA 568 A & B
- RJ 45 female for patch panel installation



## **DIGITUS® CAT 6 De Embedded Keystone Modul,** tool free connection





The fully downward compatible CAT 6a Keystone Jacks makes an easy installation in combination with excellent measurements possible. The Keystone Jack supports all current and further standards like 10GBase-T. The innovative housing design offers quick and safe wire terminations without usage of any special tools. Its compact form allows a usage of 24 Keystone Jacks in a row with a 19" 1U Patch Panel. These facts ensure an uncomplicated mounting and marking as well as a high reliability.

#### **Shielded Keystone Jack**

Cable Entry: Rear

Hole Plate Thickness: Jack will clip into a hole plate thickness of 1.6mm Max

Body: Zinc Die-casting, nickel-plated

Jack Contacts: Phosphor Bronze
IDC Contacts: Phosphor Bronze

Plating:  $50\mu m$  of gold over  $40\mu m$  of nickel

Wire Terminations: Tool Free with Cap.
Wiring Standard: EIA/TIA 568A/B

Conformance: Category 6a / 10GBase-T Channel

ANSI/EIA/TIA 568B.2.1:2002 ISO/IEC 11801:2002 EN50173-1: 2002

Certification: Independent Laboratory
Dimension: 18x24x41mm
Weight: ca. 23q

#### **Unshielded Keystone Jack**

Cable Entry: Rear

Hole Plate Thickness: Jack will clip into a hole plate thickness of 1.6mm Max

Body: Plastic
Jack Contacts: Phosphor Bronze
IDC Contacts: Phosphor Bronze

Plating:  $50\mu m$  of gold over  $40\mu m$  of nickel

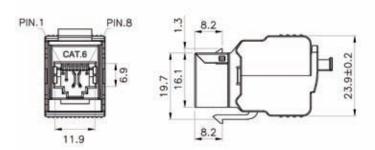
Wire Terminations: Tool Free with Cap.
Wiring Standard: EIA/TIA 568A/B

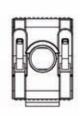
Conformance: Category 6a / 10GBase-T Channel

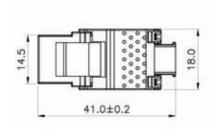
ANSI/EIA/TIA 568B.2.1:2002 ISO/IEC 11801:2002 EN50173-1: 2002

Certification: Independent Laboratory
Dimension: 18x24x41mm

Weight: ca. 10g







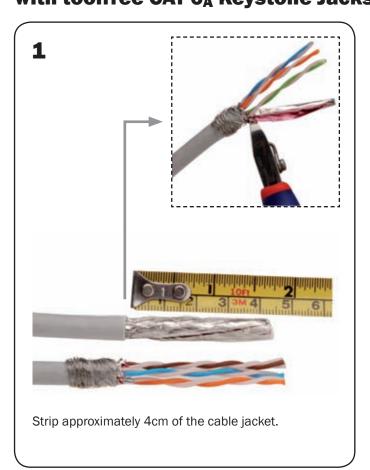
245131 / DN-93612

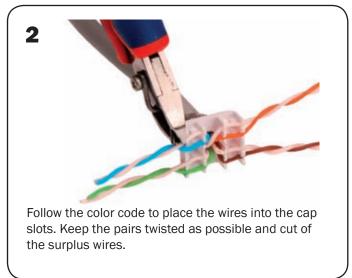
CAT 6A De Embedded Keystone jack, toolless, shielded

245124 / DN-93602

CAT 6<sub>A</sub> De Embedded Keystone jack, toolless, unshielded

# **Discover the simple Network Installation** with toolfree CAT 6<sub>A</sub> Keystone Jacks from DIGITUS®





#### **Puchdown Sequences:**

68A

Pin 5 White / Blue

Pin 4 Blue

Pin 1 White / Green

Pin 2 Green

Pin 3 White / Orange

Pin 6 Orange Pin 7 White / Brown

Pin 8 Brown

T568B

Pin 5 White / Blue

Pin 4 Blue

Pin 1 White / Orange

Pin 2 Orange

Pin 3 White / Green Pin 6 Green

Pin 7 White / Brown

Pin 8 Brown



Put the cap into Keystone Jack according to the color code.



Lock the side caps of the Keystone Jack.



Fix the Keystone Jack with a cable tie.



DN-93612 CAT 6<sub>A</sub> Certification



DN-93612 CAT 6 De Embedded Certification



**DN-93602**CAT 6 De Embedded Certification



#### **DIGITUS® Class E CAT 6 RJ45 modular** coupler, shielded



- 2x RJ45 socket
- Suitable for panel connection

**245186 / DN-93613**CAT 6, RJ45 Modular Coupler, shielded

#### Wallplate for keystone jacks, german design



- For connection of Keystone Jacks
- 2 port incl. dust cover
- Coverframe 80x80 mm incl. central frame 50x50 mm
- Expandable with surface mountbox DN-93803
- White RAL 9010

#### DIGITUS® CAT 5e RJ45 modular coupler, shielded



- 2x RJ45 socket
- Suitable for panel connection

#### 245179 / DN-93513

CAT 5e, RJ45 Modular Coupler, shielded

#### **DIGITUS®** Wallplate for keystone modules, french design



- For connection of Keystone Jacks
- 2 port incl. dust cover
- Cover frame 80x80 mm, incl. central frame 2x22,5 mm
- White RAL 9010
- Expandable with surface mountbox DN-93803

#### Surface mountbox 80/80mm



- Compatible with DIGITUS® outlets, keystone faceplates 80x80mm
- White RAL 9010

#### 259367 / DN-93803 Surface Mount Box 80x80mm

#### Surface mountbox 86/86mm



- Compatible with DIGITUS® outlets, keystone faceplates 86x86mm
- White RAL 9010

#### **DIGITUS®** Wallplate for keystone modules, british design



- For connection of keystone jacks
- 2 port
- 45° angle for plug insterted to maintain safe cable bend radius
- Full shielded metal structure for grounding
- 86/86mm frame + 2x22,5mm central frame
- White color RAL 9005
- Expandable with Surface mountbox DN-93806

259381 / DN-93805 2 Port Wallplate for Keystone Modules incl. shutter

#### Desktop housing for keystone jacks



- Plastic housing for 6 keystone jacks
- White RAL 9005



#### 19" Housing for shielded keystone jacks, incl. cable management



- Universal applicable for RJ45 and fiber optic keystone jacks
- Grey RAL 7035 1U

## 222354 / A-PAN-24-MOD-S

Modular housing, 24 port, 1U

#### 19" Housing for keysone jacks, unshielded



- Universal applicable for RJ45 and Fiber optic keystone jacks
- Black RAL 9005
- 1U

#### 157441 / A-PAN-16-MOD

Modular - housing, 16 port, 1U

157465 / A-PAN-24-MOD

Modular - housing, 24 Port, 2U

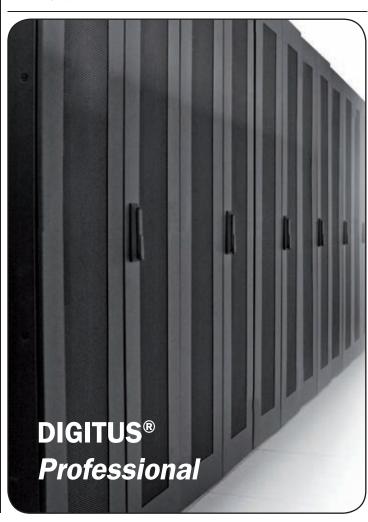
#### 19" Housing for shielded keystone jacks, incl. cable management



- Universal applicable for RJ45 and fiber optic keystone jacks
- Black RAL 9005
- 1U

#### 256281 / A-PAN-24-MOD-S-B

Modular housing, 24 port, 1U



#### Class E CAT 6 RJ45 modular plug for round cable



• Class E, up to 250 MHz

## 132936 / A-MO6 8/8 SRS

132929 / A-MO6 8/8 SR

8P8C, Shielded 8P8C, unshielded

#### Modular plugs for flat cable, unshielded



#### 065104 / A-MO 4/4 SF

RJ11 4P4C, unshielded

065111 / A-MO 6/4 SF

RJ12 6P4C, Unschielded

065135 / A-MO 6/6 SF

RJ12 6P6C. Unschielded

065159 / A-MO 8/8 SF RJ45 8P8C Unshielded

#### Hirose RJ 45 modular plug for round cable



• Shielded with strain relief and black hood

#### 184720 / A-MO 8/8 HRS

Modular plug, CAT 5e, inkl. cumb and boot

132943 / A-MO6 8/8 HRS

Modular plug, CAT 6, inkl. cumb and boot

#### Modular plugs for round cable, unshielded



#### 057949 / A-MO 4/4 SR

RJ11 4P4C, unshielded

057956 / A-MO 6/4 SR

RJ12 6P4C, unschielded

057963 / A-MO 6/6 SR RJ12 6P6C, unshielded

065173 / A-MO 8/8 SR RJ45 8P8C, unshielded

#### CAT 5e Modular plugs for round cable



• CAT 5e up to 100Mhz

#### 065180 / A-MO 8/8 SRS

Modular plug for roand cables, RJ45 8P8C, shielded, CAT 5e

#### Kink protection boot for **RJ45** plugs



- For 8P8C RJ45 modular plugs
- Suitable for shielded and unshielded modular plugs

#### 065197 / A-MOT 8/8

065203 / A-MOT/B 8/8

065210 / A-MOT/E 8/8

065234 / A-MOT/R 8/8

065227 / A-MOT/G 8/8

065241 / A-MOT/Y 8/8



#### Twisted pair cables connection box



- Connection box in metal case
- Connection of twisted pair cables via LSA strips
- Integrated strain relief.

118657 / AT-ALSA-M Connection box, CAT 5e

#### 132837 / AT-ALSA6-M

Connection Box, CAT 6

#### Modular coupler, unshielded



- 2 x RJ female
- Connection 1 : 1

## Class E, CAT 6 modular coupler, shielded



- 2 x RJ-45 female
- Shielded version
- According to Link performance class E

#### 132806 / AT-AG6 8/8

8P8C, CAT 6

#### 132813 / AT-AG6 8/8CROSS

8P8C, CAT 6, Crossover

## CAT 5e Patchcable-Adapter, shielded



- AT-AG Cx2, CAT 5e, 1:1 assigned
- AT-AG Cx2 NEW assignment: CAT 5e, 1-1, 2-2, 3-3, 4-1, 5-2, 6-6, 7-3, 8-6

#### Cat 5e modular coupler, shielded



- 2 x RJ female
- Shielded version
- CAT 5e

#### 066583 / AT-AG 8/8

Cat 5e Modular-Coupling, RJ45, 8P8C, shielded

#### 132813 / AT-AG6 8/8CROSS

Cat 6 Modular-Coupling, 8P8C, Crossover

#### **CAT** 5e modular coupler



- Three RJ45 sockets
- 8P8C
- CAT 5e

066552 / AT-A 6/6

RJ12, 6P6C

**066569 / AT-A 8/8** RJ45, 8P8C

**066590 / AT-AG CX2**CAT 5e Patch cable adapters, shielded

052364 / AT-AG CX2NEW

CAT 5e Patch cable adapters, shielded

**066576 / AT-AG 2X8/8** 3 x RJ45 female, shielded

066668 / AT-AT 8/8

3 x RJ45 female, unshielded

#### 19" IPC housing 2U

- 2 U Server housing
- Standard: 19" EIA (Electronic Industries Association)
- Drive slots: 1 x 5.25" & 7 x 3.5"
- Four PCI Slots, one USB 2.0 slot on the front
- Stable tempered metal construction
- Installation of max 13" mainboards are supported
- Four built-in 8cm fans
- Dimensions: 88mm(H) x 482mm(W) x 610mm(D)



#### 200246 / AIPC-2S100B

19" IPC Housing, without power supply, black RAL 9005

#### 200260 / AIPC-2S100B-300W

19" IPC Housing, Including power supply, black RAL 9005

#### 19" IPC Housing 4U

- 4 U server housing
- Standard: 19" EIA (Electronic Industries Association)
- Drive slots: 3x 5.25", 7x3.5"
- Sturdy tempered metal construction
- Supports ATX, baby-AT and backplane mainboards
- Transverse stabiliser with two mounted 8cm fans built in
- 4 PCI Slots
- Switch: power on/off, system reset, USB2.0
- Dimensions 175mm(H) x 483mm(W) x 431mm(D)



#### 200284 / AIPC-4S200

19" IPC Housing 4U, Without power supply, grey RAL 7035

#### 200314 / AIPC-4S200-300W

19" IPC Housing, Including power supply, grey RAL 7035

#### 19" IPC Housing 4U

- 4U server housing
- Standard: 19" EIA (Electronic Industries Association)
- Drive slots: 3x 5.25", 7x3.5"
- Sturdy tempered metal construction
- Supports ATX, baby-AT and backplane mainboards
- Transverse stabiliser with two mounted 8cm fans built in
- 4 PCI Slots
- Switch: power on/off, system reset, USB2.0
- Dimensions 175mm(H) x 483mm(W) x 431mm(D)



#### 200291 / AIPC-4S200B

19" IPC Housing 4U, Without power supply, black RAL 9005

#### 200307 / AIPC-4S200B-300W

19" IPC Housing 4U, including power supply, black RAL 9005



#### **SAS** connection cable



This internal cable connects SAS (Serial Attached SCSI) devices to a SAS controller.

SAS 29-pin plug (SFF-8482) - SAS 29-pin plug (SFF-8482)

- Molded housing
- Color: red

#### **SAS - SATA** connection cable



SAS 29-pin plug (SFF-8484) - 2x SATA 7-pin plug + 5,25" power plug

- Molded housing
- Color: red

#### **SAS** connection cable



This internal cable connects SAS (Serial Attached SCSI) devices.

SAS 32-pin plug (SFF-8484) - SAS 32-pin plug (SFF-8484)

- Molded housing
- Color: red

#### 258438 / DK-127001

0.50 m

#### SAS connection cable



This internal cable connects four SAS (Serial Attached SCSI) devices to a SAS controller.

SAS 32-pin plug (SFF-8484) - 4x SAS 29-pin plug + 5,25" power plug

- Molded housing
- Color: red

258445 / DK-127002

#### SAS - SATA connection cable



This cable connects four Serial ATA devices to a SAS (Serial Attached SCSI) controller.

SAS 32-pin plug (SFF-8484) - 4x SATA 7-pin plug

- Molded housing
- SATA plugs with metal latch
- Color: red

258452 / DK-127003

0,50 m

#### **SAS - SATA** connection cable



This internal cable connects four Serial ATA devices to a SAS (Serial Attached SCSI) controller.

SAS 32-pin plug (SFF-8484) - 4x SATA 7-pin plug + 6-pin LED jack

- Molded housing
- SATA plugs with metal latch
- LED power connection cable for drive cage LEDs (2 x 3-pin female header)
- Color: red

#### 258520 / DK-127007

1.0 m

258483 / DK-127006

0,50 r

258469 / DK-127004 0,50 m

70

#### 0,50

258476 / DK-127005 0,50 m

#### **SAS** connection cable



This internal cable connects SAS (Serial Attached SCSI) devices.

Mini SAS 36-pin plug (SFF-8087) - Mini SAS 36-pin plug (SFF-8087)

- · Molded housing
- SFF-8087 plugs with metal latch
- Color: red with meshwork tupe

#### **SAS** connection cable



This internal cable connects (Serial Attached SCSI) devices.

Mini SAS 36-pin plug (SFF-8087) - SAS 32-pin plug (SFF-8484)

- Molded housing
- SFF-8087 plug with metal latch
- Color: red with meshwork tupe

## SAS - SATA connection cable



This internal cable connects four Serial ATA devices to a SAS (Serial Attached SCSI) device.

Mini SAS 36-pin plug (SFF-8087) - 4x SATA 7-pin plug

- Molded housing
- SFF-8087 plug with metal latch
- Color: red

## 258551 / DK-127008

#### SAS - SATA connection cable



This internal cable connects four Serial ATA devices to a SAS (Serial Attached SCSI) device.

Mini SAS 36-pin plug (SFF-8087) - 4x SATA 7-pin plug

- Molded housing
- All plugs with metal latch
- Color: transparent/blue with meshwork tupe

258575 / DK-127009

0,50 m

#### **SAS** connection cable



This internal cable connects SAS (Serial Attached SCSI) devices.

Mini SAS 36-pin plug (SFF-8087) - SAS 29-pin plug (SFF-8482)  $\pm$  4x 5,25" power plug

- Moulded housing
- SFF-8087 plug with metal latch
- Color: black

258582 / DK-127010

0,50 m

#### **SAS** connection cable



This external Infiniband cable connects SAS (Serial Attached SCSI) devices

SAS Infiniband plug (SFF-8470) - SAS Infiniband plug (SFF-8470)

- Metal housing
- Color: black

258599 / DK-127011

0,50 m

258605 / DK-127012

0,50 m

258612 / DK-127013

1,0 m



#### **SAS** connection cable



This external cable connects SAS (Serial Attached SCSI) devices.

Mini SAS 26-pin plug (SFF-8088) - Mini SAS 26-pin plug (SFF-8088)

- Metal housing
- Color: black

## **258629 / DK-127014** 1,0 m

#### **SAS** connection cable



This external cable connects SAS (Serial Attached SCSI) devices.

ini SAS 26-pin plug (SFF-8088) - Mini SAS 36-pin plug (SFF-8087)

- SFF-8088 plug metal housing
- SFF-8087 plug molded housing
- Color: transparent/blue

#### **SAS** connection cable



This external cable connects SAS (Serial Attached SCSI) devices.

SAS Infiniband plug (SFF-8470) - Mini SAS 26-pin plug (SFF-8088)

- Metal housing
- Color: black

#### 258636 / DK-127015

#### SAS - eSATA connection cable



This external cable connects four Serial ATA devices to a SAS (Serial Attached SCSI) device.

Mini SAS 26-pin plug (SFF-8088) - 4x eSATA 7-pin plug

- eSATA plugs with molded housing
- SFF-8088 plug with metal housing
- Color: transparent/blue

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258650 / DK-127017