# DATA CENTER CABLING SOLUTIONS

AJ

-

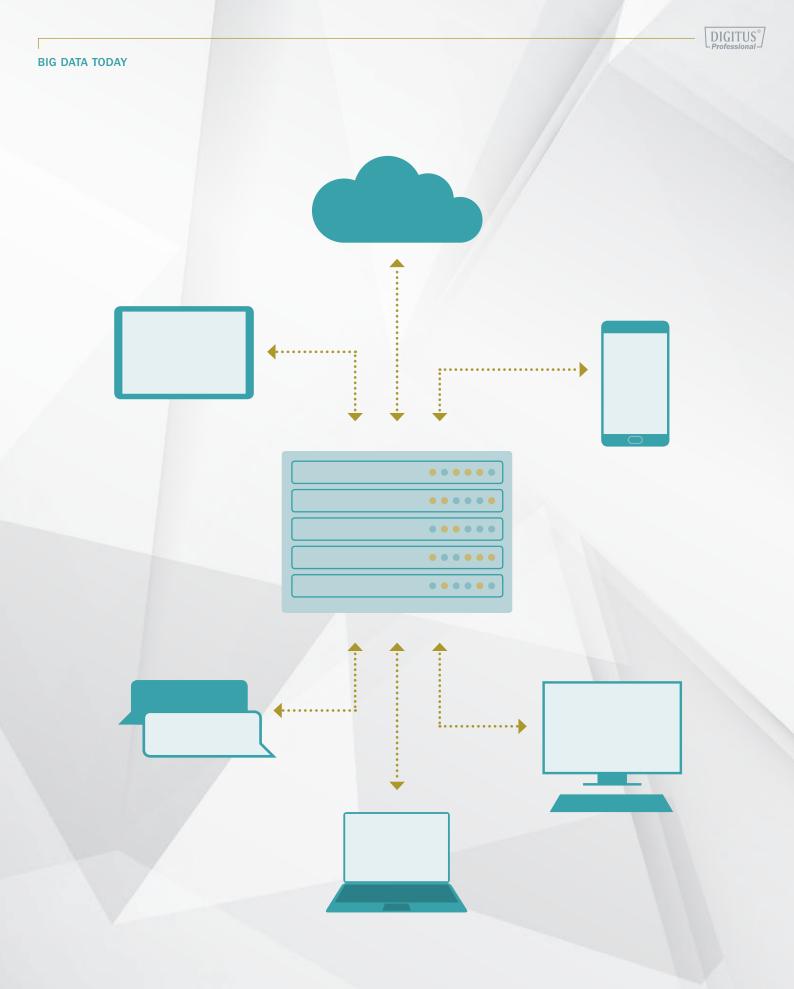
DIGITUS<sup>®</sup> Professional

Ad

00

• •

JUL



#### **BIG DATA**

The flood of data has now reached the trillion range worldwide. The trend now goes from Big Data to predictive analysis. This is how data is evaluated and the relevant data is processed and stored.

# DIGITUS® PROFESSIONAL -THE SUPPLIER FOR YOUR NETWORK INFRASTRUCTURE

"Data centers always have a past. A past in which today's computer capacities and data volumes seemed hardly conceivable. Data centers have a future. A future in which data volumes that we still cannot estimate today is in store for us."

Data centers grow and must be able to grow. The cabling within a data center should always be viewed as a long-term investment. It is the foundation - it allows the interaction of all components. The quality of the cabling also determines the downtimes.

The better the foundation, the less error-prone your data center is. Well-planned, structured cabling brings order to the data center and also saves time. Installations and conversions are done so quickly and efficiently.

DIGITUS<sup>\*</sup> Professional provides you with fiber optic and copper cabling according to your wishes. Our solutions do not only meet your requirements but whatever current standards and regulations of course. They are tested. You can view all certificates before buying.

#### Available worldwide

We are a strong, customer-oriented logistics service provider. Our products can be procured and shipped worldwide. This is possible thanks to our regional warehousing in our own logistics centers. Thanks to our expanded high-bay warehouse facilities at our headquarters in Lüdenscheid, we can guarantee high delivery capacity.

#### Implement projects successfully delivery up to the construction site

Our product managers know our cables from the sheathing to the twisting. They know what is really needed locally at the construction site or in the data center. Our team will gladly create an individual offer for you and will be happy to support you in optimally planning your project from the ground up. 06 DATA CENTERS

AP

100

1100

1111

- 08 STANDARDS & DIRECTIVES
- **12** TIER STANDARDS
- **14** COPPER & FIBER OPTIC

123

-

......

1011

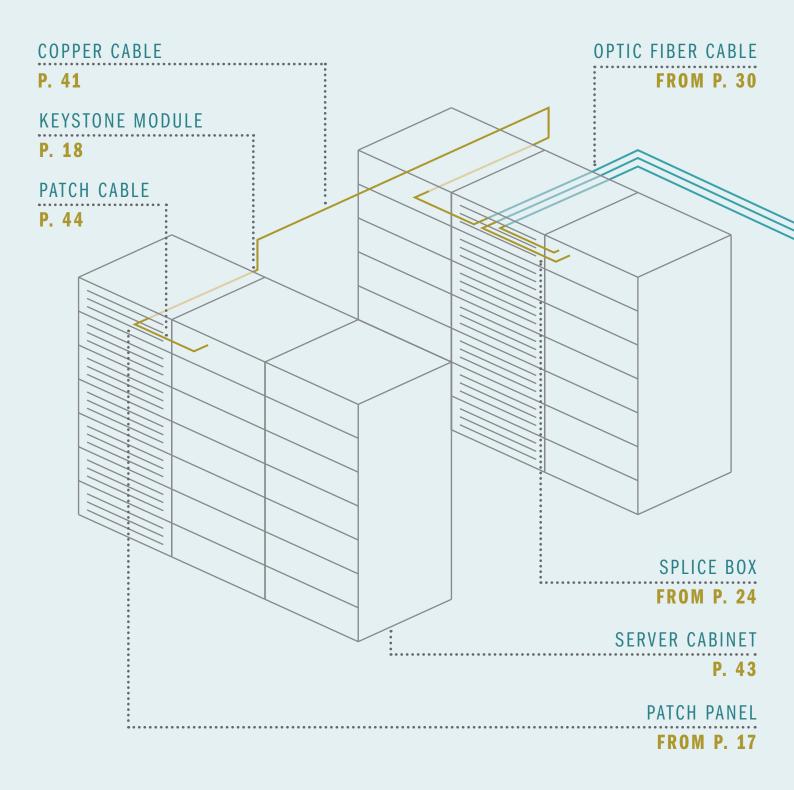
for some side and

101101-0007

TT

10 10 0

- 16 HIGH DENSITY
- 24 SPLICE BOX
- 28 SECURITY
- **30** FIBER OPTIC CABLE
- **37** OM5
- **38** COPPER CABLE
- 41 TRUNK CABLE
- 46 PROJECT BUSINESS
- 48 MOTIVATION
- 50 CONTACT





CATEGORY	<b>6</b> <sub>A</sub>	7	<b>7</b>	8
GBIT ETHERNET	10 GBit	40 GBit	100 GBit	400 GBit
FIRE CLASS	Eca	D <sub>ca</sub>		
DESIGN COMPATIBLE	9			
CERTIFIED	$\bigcirc$			



# DIGITUS® PROFESSIONAL -FLEXIBLE SOLUTIONS FOR DATA CENTERS

DIGITUS<sup>®</sup> Professional offers you components and products for technical building equipment used in data centers, e.g. for automotive manufacturers, airports, universities and industrial companies. With DIGITUS<sup>®</sup> Professional, demanding users, specialist companies, installers and data center specialists receive the products they need for the optimal design of their projects. As a manufacturer and distributor with subsidiaries in Europe and Asia, we work together with international system integrators, distributors and resellers.

# Over 45 years of experience in the IT industry

We offer you all the building blocks for the construction, operation and restructuring of successful and efficient data centers.



#### **REDUCE COMPLEXITY**

We make the data center easier to understand!

#### **ORGANIZE INFRASTRUCTURE**

We make the data center better organized!

#### **INCREASE RELIABILITY**

We make the data center more secure!

#### **INCREASE EFFICIENCY**

We make the data center more productive!

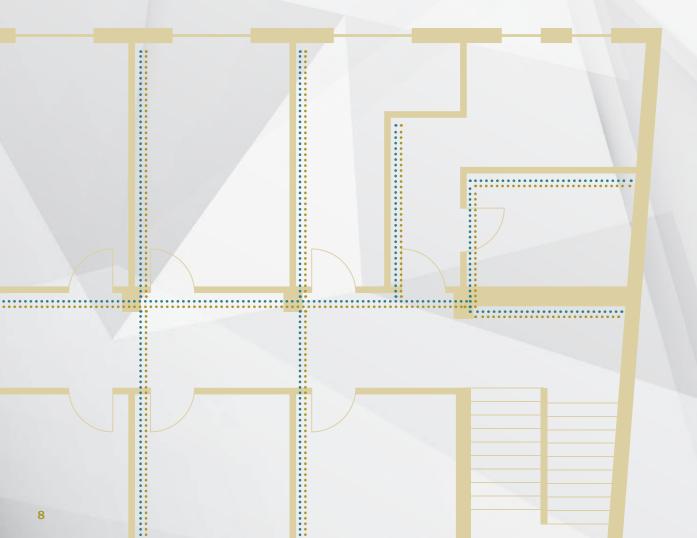
## **USE INTELLIGENT TECHNOLOGY**

We make the data center more environmentally friendly!



# CONSTRUCTION PRODUCTS REGULATION

Regulation (EU) No. 305/2011 EN 50575. The Construction Products Regulation (CPR) refers to the CE marking of cables.



# "High-voltage cables and lines, control and communication cables cables and lines for general use in construction works relating to the fire behavior requirements EN 50575"

This regulation has existed for over 15 years, but has not imposed any requirements on copper and fiber optic cables so far. Of course, we are familiar with the CE marking that is used for active devices and components such as power strips, cameras and Ethernet switches.

The testing standards for all EU member states were now ratified and announced in the official journal of the EU (305/2011) in February 2016. The regulation itself regulation must then be checked and marked accordingly. The major change in the specifications is the replacement of the fire protection class IEC 60332 by a series of Euro classes ( $A_{ca} - F_{ca}$ ). Where  $A_{ca}$  is the strongest and  $F_{ca}$  is the weakest flame retardant.

The  $E_{ca}$  and  $B2_{ca}$  classes have come into focus because they contain most of the changes in terminology and the specification requirements. The  $E_{ca}$  class corresponds to the existing IEC 60332-1. The class with

CLASS	A <sub>ca</sub>	B1 <sub>ca</sub>	B2 <sub>ca</sub>	C <sub>ca</sub>	D <sub>ca</sub>	E <sub>ca</sub>	F <sub>ca</sub>
EN ISO 1716 Combustion heat							
EN 50399 Heat Release & Smoke production							
EN 60332-1-2 Vertical flame propagation				•			
EN 61034-2 Smoke density				•			
<b>EN 60754-2</b> Acidity							

entered into force on July 1, 2016, but it is granted coexistence until July 1, 2017. During this period, untested products can continue to be sold and installed meanwhile, manufacturers are required to test the cables and classify them according to the new standard. Until July 1, 2017, all products affected by the new

the currently higher requirements for fire performance IEC 60332-3 lies between the new Euro classes B2<sub>ca</sub> and C<sub>ca</sub>. However, it leans more towards the C<sub>ca</sub> class. The task of the cable industry now is to rework the respective cables and has the goal of meeting the requirements of these new classes. **>** 



The Construction Products Regulation refers "only" to the "permanently laid/installed infrastructure", thus it does not contain any connection components or patch cables and also any compact modules. However, it covers all prefabricated solutions, such as fiber optic/ copper trunk cables, which are considered to be "permanently installed". These are dependent, however, on the mass cable certification on which the assembly was built.

A requirement of the new Euro classes: - Manufacturers of cabling systems are responsible for deciding whether to test the cables themselves or to commission an external company to verify compliance with the standards. This is listed in detail in EN 50575. Finally, a "notified body" must be commissioned to approve test results. Products cannot be labeled in accordance with the Euro class or be regarded as compliant without the certifying body's confirmation of the test results.

But how does a certifying body become a "notified body"? If a certifying body wants to apply for "notified

body" status, this process usually takes two to three weeks. After receiving "notified body" status, it is able to evaluate the customer's test data (manufacturers, cabling system vendors, distributors) and subsequently issue a report and a certificate. It is expected that this certification process will take another two to three weeks.

#### What is the impact of the Construction Products Regulation on you - our customers and DIGITUS<sup>®</sup> Professional?

The introduction of this regulation is a significant development and needs to be clearly understood by all actors involved in the structured cabling market. These changes to the product design as well as the correct marking and packaging should be mandatorily effected and must be observed by the distributors. It is to be expected that the requirements of the new specifications will be understood by market participants within the coexistence period of the regulation. We are well-prepared for the introduction of the new cable classes and will distribute the  $E_{ca}$  and  $D_{ca}$  class cables from Q2 2017 as planned.



# New regulation CE directive for "permanently installed communication cables"

On July 1, 2017, there will be a radical change in the cabling industry. The change was already adopted on July 1, 2016, but there is a grace period of 12 months. During this time, communication cables without CE marking can be sold. This period is referred to as coexistence.

CE markings must be affixed on copper and fiber optic installation cables according to law. CE marking does not necessarily have to be carried out on the cable, but nevertheless in the form of a sticker on the packaging materials such as the cardboard box and the cable drum. CE marking on patch cables is not necessary, since patch cables are not regarded as "permanently laid" cables.

The new EN 50575 standard includes power, telecommunication and signal cables for general use in construction works. Precisely for this reason, the installation cables currently used are, for example: **Copper Cat. 7 S/FTP AWG23/1 – Fiber optic I-DQ (ZN) BH 4 G 50/125µ OM4** are impacted by the regulation because these are "permanently" installed in the build-ing. The good news in this context is that the product management of DIGITUS<sup>®</sup> Professional has already begun to declare the cables according to legislation and the new EN 50575 standard. Thus, from the end of Q1 | 2017, future deliveries of goods are already guaranteed with CE marking and Euro classification in accordance with EN 50575.

In this context, one also speaks of accompanying documents, the so-called DoP (Declaration of Performance) documents. If a cable has CE marking, then the product also has a valid DoP. The DoP confirms the performance for the respective product and the fire properties. An installation cable with CE marking without an associated DoP is not compliant! With the introduction of CE marking for laying cables, the European Union has allowed the products to be compared with regard to fire properties, since the cables are classified, documented and certified by "notified bodies" accredited testing bodies.

#### **TIER-STANDARDS**



# **TIER AT A GLANCE**

Data centers are divided into different ranks. The 4 TIER standards provide information on the quality level of the individual data center. In this test, availability and failure safety come first, but at the same time, the results of energy efficiency, system technology, data security and administration of the data center are also included in the evaluation.

1 SYSTEM I 1 SUPPLY PATH PATH

**T1** 

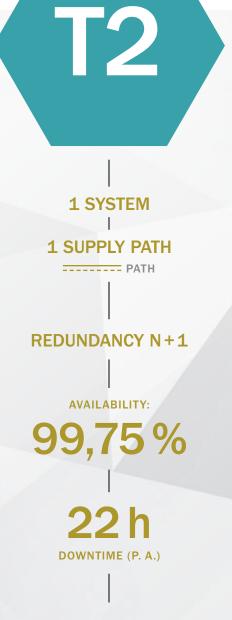
**REDUNDANCY 1** 

AVAILABILITY:

99,67% | 28h downtime (p. a.)

# **SUITABLE FOR:**

Smaller companies without electronic customer support with purely static Internet presence. IT is only used to handle internal processes.



# SUITABLE FOR:

Smaller companies that do not have to be constantly online. All computer systems can be switched off at the end of the workday.



T4

2 SYSTEMS

2 SUPPLY PATH ------ PATH A ------ PATH B

**REDUNDANCY MIN. N+1** 

AVAILABILITY: 99,99%

0,8h

# SUITABLE FOR:

**1,6h** 

DOWNTIME (P. A.)

Service providers and medium-sized companies such as customer service centers, which should be constantly accessible, but can cope with short downtimes.

# SUITABLE FOR:

Service providers such as online platforms or financial service providers, which are accessible every day of the year and around the clock over the Web and need to have access to their data. Companies whose employees work in different time zones around the world.



# COPPER OR FIBER OPTION

Combine sensibly.

We gladly preempt the answer: Copper **and** fiber optic are the perfect partners. Use the respective advantages of the materials intelligently. This allows high speeds to be reached while saving costs at the same time.

Fiber optic cables guarantee high data transmission rates and exhibit a higher packing density than copper cables. The optic fiber totally demonstrates its advantages over long distances. Therefore, the basic backbone cabling in the data center is based mainly on fiber optic cables.

Since fiber optic cables are more expensive to purchase, the combination with the tried and tested copper cables is worthwhile. They are more cost-effective, easy to install, bring about low assembly costs and are easier to integrate into existing network structures. Use copper cables for short distances, such as top-ofthe-rack or mid-of-the-rack cabling.

Of course, we also offer you a variety of MPO solutions. These are indispensable in high-end state-of-the-art data centers.



I SALEA

-

ą

inpited

WILLIAM

4 8 19

-

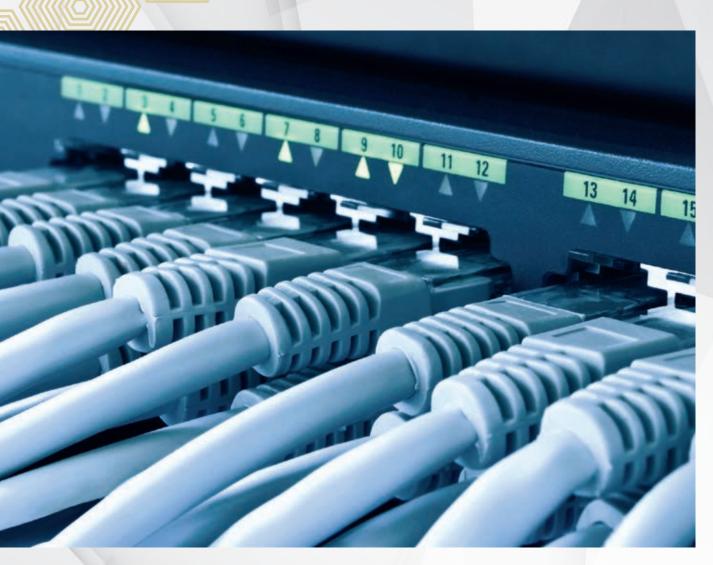
T IA CANE

123 1244 1447 185 144 1447

Constant and the state and

103133

# HIGH DENSITY More power in less space



High density distribution panels from DIGITUS<sup>®</sup> Professional provide 24 RJ45 ports on a half height unit or 48 RJ45 ports on one height unit for the cabling in the network cabinet. You can double the number of ports on the same space within your rack. The modular patch panels are suitable for all tool-free keystone modules from DIGITUS<sup>®</sup> Professional and have a central ground connection and a practical labeling field.

## DIGITUS<sup>®</sup> Professional 483 mm (19") PATCH PANEL FOR KEYSTONE MODULES, HIGH DENSITY



#### PRODUCT INFORMATION

Black (RAL 9005), shielded

#### AREA OF APPLICATION

483 mm (19") cabinet

#### NORMS

ISO/IEC 11801 2nd Ed., EN 50173-1, EIA/TIA 568-C

#### **GENERAL PROPERTIES**

Suitable for 483 mm (19") cabinet mounting, Suitable for shielded DIGITUS<sup>®</sup> Keystone Modules and Couplers, Cable fixing with cable tie, Central grounding connection, Integrated dust cover, Plastic label field

#### PACKAGE CONTENT

Distribution Panel, Cable Tie

#### **TECHNICAL PROPERTIES**

HOUSING MATERIAL:	1.5 mm SPCC cold rolled steel sheet, powder-coated
MATERIAL STANDARD:	EN 10 130(1991), BS 1449, NFA 36/401, DIN 1623, UNI 5866, UNE 36-086, SIS, JIS G 3141, ASTM, SAE
GOUNDING BAR MATERIAL:	Galvanized steel
GROUNDING WIRE:	18 AWG, 40 cm

#### PHYSICAL PROPERTIES

OPERATING TEMPERATURE: -20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)

#### **PRODUCT NUMBER**

48 Ports, 1U, Layout double-row straight	DN-91424
24 Ports, 0,5U, Layout single-row straight	DN-91422

# HIGH DENSITY DISTRIBUTION PANEL (DN-91424) - 48 PORTS ON ONE HEIGHT UNIT

The high-density distribution panel is an efficient way to increase port density in cabinets. These distribution panels are available for your own equipment without a keystone module. It can be used universally in all 483 mm (19") distribution cabinets. The matching keystone modules from DIGITUS\* Professional can be obtained individually or in practical 24-piece packaging units.

SUITABLE FOR THE PATCH PANEL: KEYSTONE MODULE DN-93617



KEYSTONE Module	CAT $6_A$ , SHIELDED	CAT $6_A$ , SHIELDED	CAT $6_A$ , UNSHIELDED
PRODUCT INFORMATION	Shielded, 1 Port, Tool-free installation	Shielded, 1 Port, Tool-free installation	Unshielded, 1 Port, Tool-free installation
AREA OF APPLICATION:	Up to 500 MHz, 10 GBase-T	Up to 500 MHz, 10 GBase-T	Up to 500 MHz, 10 GBase-T
NORMS	ISO/IEC 11801 2nd Ed., EN 50173-1, EIA/TIA 568-C, 802.3af, 802.3at PoE+	ISO/IEC 11801 2nd Ed., EN 50173-1, EIA/TIA 568-C, 802.3af, 802.3at PoE+	ISO/IEC 11801 2nd Ed., EN 50173-1, EIA/TIA 568-C, 802.3af, 802.3at PoE+
GENERAL PROPERTIES:	Suitable for patch panels and mounting outlets, RJ45 Female, 8P8C, Cable installation via LSA+-strips, color coded according to EIA/TIA 568 A & B, Cable fixing with cable tie, Tool-free installation 360°-shield contact, Dust cover included Design compatible to current switch programs	Suitable for patch panels and wall outlets, RJ45 Female, 8P8C, Cable installation via LSA+-strips, color coded according to EIA/TIA 568 A & B Cable fixing with cable tie, 360°-shield contact, Dust cover included	Suitable for 483 mm (19") cabinet mounting, RJ45 female, 8P8C, Cable installation via LSA+-strips, color coded according to EIA/TIA 568 A & B, Cable fixing with cable tie
TECHNICAL PROPERTIES			
HOUSING MATERIAL:	Zinc die-cast, nickel-plated	Zinc die-cast, nickel-plated	ABS UL 94V-0
RJ45 JACK MATERIAL:	Housing: ABS UL 94V-0 Contact clamp: ABS UL 94V-0	Housing: ABS UL 94V-0 Contact clamp: ABS UL 94V-0	Housing: ABS UL 94V-0 Contact clamp: ABS UL 94V-0
RJ45 JACK CONTACT:	Phosphor bronze 0.5 μ gold-plated contact	Phosphor bronze 0.5 μ gold-plated contact	Phosphor bronze 0.5 $\mu$ gold-plated contact
RJ45 SHIELDING:	Tinned bronze	Tinned bronze	-
LSA TERMINATION CLAMP:	Krone LSA+, UL 94V-2, Tinned phosphor bronze	Krone LSA+, UL 94V-2, tinned phosphor bronze	Krone LSA+, UL 94V-2, Tinned phosphor bronze
CONDUCTOR PLATE:	FR4, ABS UL 94V-0	FR4, ABS UL 94V-0	FR4, ABS UL 94V-0
PHYSICAL PROPERTIES			
INSERTION FORCE:	30N max. (IEC 60603-7-5)	30N max. (IEC 60603-7-5)	30N max. (IEC 60603-7-5)
RETENTION STRENGTH:	7.7 kg between jack and plug	7.7 kg between jack and plug	7.7 kg between jack and plug
OPERATION TEMPERATURE:	-20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)	-20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)	-20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)
MATING CYCLES FEMALE:	> 750 acc. to ISO/IEC 11801, IEC 60603-7-51	> 750 acc. to ISO/IEC 11801, IEC 60603-7-51	> 750 acc. to ISO/IEC 11801, IEC 60603-7-41
CLAMP:	> 200 acc. to ISO/IEC 11801, IEC 60603-7-51	> 200 acc. to ISO/IEC 11801, IEC 60603-7-51	> 200 acc. to ISO/IEC 11801, IEC 60603-7-41
IDC WIRE SIZE:	22–26 AWG solid and stranded conductor	22–26 AWG solid and stranded conductor	22–26 AWG solid and stranded conductor
INSULATION RESISTANCE:	> 500 MOhm	> 500 MOhm	> 500 MOhm
CONTACT RESISTANCE:	< 20 MilliOhm	< 20 MilliOhm	< 20 MilliOhm
PRODUCT NUMBER			
1 Keystone Module	DN-93617	DN-93615	DN-93606
	DN-93617-24	DN-93615-24	

# DIGITUS<sup>\*</sup> Professional 483 mm (19<sup>\*\*</sup>) PATCH PANEL (LSA+) CAT 6<sub>A</sub>, HIGH DENSITY, SHIELDED



#### PRODUCT INFORMATION

24 Ports, Black (RAL 9005), 0,5 U

#### AREA OF APPLICATION

Up to 500 MHz, 10 GBase-T

#### NORMS

ISO/IEC 11801 2nd Ed., EN 50173-1, EIA/TIA 568-C

# GENERAL PROPERTIES

Suitable for 483 mm (19") Cabinet mounting, RJ45 jack, 8P8C, Cable installation via LSA+-strips, color coded according to EIA/TIA 568 A & B, Cable fixing with cable tie, Central ground connection, only shielded version, 360°-shield contact, only shielded version, Integrated dust caps

#### PACKAGE CONTENT

Patch Panel, Cable Tie

#### PRODUCT NUMBER

Category 6<sub>A</sub>, Class E<sub>A</sub>

DN-91624S-SL-EA

#### TECHNICAL PROPERTIES

HOUSING MATERIAL:	1.5 mm galvanic cold rolled steel, acc. to EN1.4301, UNS S30400, AISI 304 and LMSAD110
RJ45 FEMALE	Housing: ABS UL 94V-0
MATERIAL:	Contact clamp: ABS UL 94V-0
RJ45 FEMALE	Tinned phosphor bronze
CONTACT:	0.5 µ gold-plated contact
RJ45 SHIELDING:	Tinned bronze
LSA TERMINATION	Krone LSA+, UL 94V-2
CLAMP:	Tinned phosphor bronze
CONDUCTOR PLATE:	FR4, UL 94V-0

#### PHYSICAL PROPERTIES

INSERTION FORCE:	30N max. (IEC 60603-7-5)
RETENTION STRENGTH:	7.7 kg between jack and plug
OPERATION TEMPERATURE:	-20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)
MATING CYCLES FEMALE:	> 750 acc. to ISO/IEC 11801, IEC 60603-7-51
CLAMP:	> 200 acc. to ISO/IEC 11801, IEC 60603-7-51
IDC WIRE SIZE:	22 – 26 AWG solid and stranded conductor
INSULATION RESISTANCE:	> 500 M0hm
CONTACT RESISTANCE:	< 20 MilliOhm
DIELECTRIC STRENGTH:	1000 VDC (Contact/Contact) 1500 VDC (Contact/Ground)

PATCH PANEL

# DIGITUS\* Professional MPO/MTP\*- CASSETTE FOR THE 3 CASSETTE PATCH PANEL

#### DIGITUS\* Professional MPO/MTP\* PATCH PANEL FOR 3 CASSETTES



\*\*\*\*\*\*

PRODUCT NUMBER	FIBER TYPE	COLOR	SLEEVE	GBIT
6×LC/DX, LC to MPO (n	nale)			
DN-96333-2/3	0M3	aqua	PC	10
DN-96333-2-4	OM4	violet	PC	40
DN-96333-2-5	OM5	lemon green	PC	100
DN-96333-2/9	0S2	blue	PC	10
DN-96333-3/9APC	0S2	green	APC	10
6×LC/Quad, LC to MPO	(male)			
DN-96433-2/3	0M3	aqua	PC	10
DN-96433-2-4	OM4	violet	PC	40
DN-96433-2-5	OM5	lemon green	PC	100
DN-96433-2/9	0S2	blue	PC	10
DN-96433-2/9APC	0S2	green	APC	10
6×SC/DX, SC to MPO (r	nale)			
DN-96332-2/3	0M3	aqua	PC	10
DN-96332-2-4	OM4	violet	PC	40
DN-96332-2-5	OM5	lemon green	PC	100
DN-96332-2/9	0S2	blue	PC	10
DN-96332-2/9APC	0S2	green	APC	10
Blind plate				
DN-96333-2-0				

#### PRODUCT INFORMATION

a .a

The MPO/MTP° distribution panel is designed for use in the data center. This Patch panel is the solution to distribute MPO/MTP° cables to LC or SC couplers. This 483 mm (19") distribution panel can provide up to 72 LC connections.

#### PRODUCT NUMBER

DN-96613-2

Patch panel

## DIGITUS\* Professional MPO/MTP\*- CASSETTE FOR THE 4/8 CASSETTE PATCH PANEL

## DIGITUS\* Professional MPO/MTP\* PATCH PANEL FOR 4/8 CASSETTES

DN-96610-2U



PRODUCT NUMBER	FIBER TYPE	COLOR	SLEEVE	GBIT
6×LC/DX, LC to MPO (n	nale)			
DN-96343-2/3	0M3	aqua	PC	10
DN-96343-2-4	OM4	violet	PC	40
DN-96343-2-5	OM5	lemon green	PC	100
DN-96343-2/9	0S2	blue	PC	10
DN-96343-2/9APC	0S2	green	APC	10
6×LC/Quad, LC to MP0	(male)			
DN-96443-2/3	0M3	aqua	PC	10
DN-96443-2-4	OM4	violet	PC	40
DN-96443-2-5	OM5	lemon green	PC	100
DN-96443-2/9	0S2	blue	PC	10
DN-96443-2/9APC	0S2	green	APC	10
6×SC/DX, SC to MPO (r	nale)			
DN-96342-2/3	0M3	aqua	PC	10
DN-96342-2-4	OM4	violet	PC	40
DN-96342-2-5	OM5	lemon green	PC	100
DN-96342-2/9	0S2	blue	PC	10
DN-96342-2/9APC	0S2	green	APC	10
Blind plate				
DN-96343-2-0				



#### PRODUCT INFORMATION

The MPO/MTP° distribution panel is designed for use in the data center. This Patch panel is the solution to distribute MPO/MTP° cables to LC or SC couplers. This 483 mm (19") distribution panel can provide up to 96 LC connections (1 Unit) and 192 LC connections (2 Units).

PLUGS:	for a maximum of 4/8 cassettes
LAYOUT:	maximum of 96/192 fibers
DIMENSIONS:	For 4 cassettes: 1 U×19" (44.45×482×260 mm) For 8 cassettes: 2 U×19" (88.9×482×260 mm)
HOUSING:	Black painted steel plate (RAL 9005)

PRODUCT NUMBER	
DN-96614-2	Patch panel for 4 cassettes
DN-96610-2U	Patch panel for 8 cassettes

PATCH PANEL

# DIGITUS\* Professional MPO/MTP\*- CASSETTE FOR THE 5 CASSETTE PATCH PANEL

## DIGITUS\* Professional MPO/MTP\* PATCH PANEL FOR 5 CASSETTES



PRODUCT NUMBER	FIBER TYPE	COLOR	SLEEVE	GBIT
6×LC/DX, LC to MPO (male)				
DN-96353-2/3	0M3	aqua	PC	10
DN-96353-2-4	OM4	violet	PC	40
DN-96353-2-5	OM5	lemon green	PC	100
DN-96353-2/9	0S2	blue	PC	10
DN-96353-2/9APC	0S2	green	APC	10
6×LC/Quad, LC to MPO	(male)			
DN-96453-2/3	OM3	aqua	PC	10
DN-96453-2-4	OM4	violet	PC	40
DN-96453-2-5	OM5	lemon green	PC	100
DN-96453-2/9	0S2	blue	PC	10
DN-96453-2/9APC	0S2	green	APC	10
6×SC/DX, SC to MPO (r	nale)			
DN-96352-2/3	OM3	aqua	PC	10
DN-96352-2-4	OM4	violet	PC	40
DN-96352-2-5	OM5	lemon green	PC	100
DN-96352-2/9	0S2	blue	PC	10
DN-96352-2/9APC	0S2	green	APC	10
Blind plate				
DN-96352-2-0				

#### PRODUCT INFORMATION

The MPO/MTP\* distribution panel is designed for use in the data center. This Patch panel is the solution to distribute MPO/MTP\* cables to LC or SC couplers. This 483 mm (19") distribution panel can provide up to 120 LC connections.

for a maximum of 5 cassettes
maximum of 120 fibers
1 U×19" (44.45×482×260 mm)
Black painted steel plate (RAL 9005)

#### PRODUCT NUMBER

DN-96615-2

Patch panel

# DIGITUS\* Professional 483 mm 19" PATCH PANEL (LSA+) CAT 6<sub>A</sub>, SHIELDED 6 @ ()



PRODUCT	INFORMATIO	ЛС
---------	------------	----

24 Ports, Grey (RAL 7035), 1U

#### AREA OF APPLICATION

Up to 500 MHz, 10 GBase-T

#### NORMS

ISO/IEC 11801 2nd Ed.; EN 50173-1; EIA/TIA 568-C 802.3af; 802.3at PoE+

#### **GENERAL PROPERTIES**

Suitable for 483 mm (19") cabinet mounting, RJ45 Female, 8P8C, Cable installation via LSA+-strips, color coded according to EIA/TIA 568 A & B Cable fixing with cable tie, Central ground connection, 360°-shield contact, Integrated dust cover, Plastic label field

#### PACKAGE CONTENT

Patch Panel, Cable Tie

# PRODUCT NUMBER

Category  $6_A$ , Class  $E_A$ 

DN-91624S-EA

#### **TECHNICAL PROPERTIES**

HOUSING MATERIAL:	1.5 mm galvanic cold rolled steel, acc. to EN1.4301, UNS S30400, AISI 304 and LMSAD110
RJ45 FEMALE	Housing: ABS UL 94V-0
MATERIAL:	Contact clamp: ABS UL 94V-0
RJ45 FEMALE	Tinned phosphor bronze
CONTACT:	0.5 μ gold-plated contact
RJ45 SHIELDING:	Tinned bronze
LSA TERMINATION	Krone LSA+, UL 94V-2,
CLAMP:	Tinned phosphor bronze
CONDUCTOR PLATE:	FR4, UL 94V-0

#### PHYSICAL PROPERTIES

INSERTION FORCE:	30N max. (IEC 60603-7-5)
RETENTION STRENGTH:	7.7 kg between jack and plug
OPERATION TEMPERATURE:	-20 °C to +70 °C (ISO/IEC 11801, EN 50173-1, ANSI/TIA/EIA 568 C)
MATING CYCLES FEMALE:	> 750 acc. to ISO/IEC 11801, IEC 60603-7-5
CLAMP:	> 200 acc. to ISO/IEC 11801, IEC 60603-7-5
IDC WIRE SIZE:	22 – 26 AWG solid and stranded conductor
INSULATION RESISTANCE:	> 500 M0hm
CONTACT RESISTANCE:	< 20 MilliOhm
DIELECTRIC STRENGTH:	1000 VDC (Contact/Contact) 1500 VDC (Contact/Ground)

# SPLICE BOXES

# DIGITUS\* Professional SPLICE BOX, EQUIPPED WITH LC DUPLEX COUPLERS



The splice box is the place in the cabinet where the individual fibers of a fiber optic cable are split. They provide couplers for connecting various types of connectors. Our splice boxes have a practical telescopic extension. This allows the cabling to work without having to remove the entire box. You will receive splice boxes that operate in the OM2 to OM5 and OS2 categories. They are assembled with 6, 12 or 24 ready to splice couplers and therefore include up to 48 fibers spread over up to 4 splice cassettes.

Take advantage of our assembly offer: We assemble the various versions with screw connections, splice cassettes and all types of couplers according to your wishes.

#### PRODUCT INFORMATION

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44.45 (1U)  $\times$  483 (19")  $\times$  280 mm

#### HOUSING:

Full metal varnished light grey (RAL 7035) or black (RAL 9005, please add an -B behind the article number), Numbers as screen printing

#### FRONT PLATE:

483 mm (19") with mounted LC Duplex Couplers (plastic housing)

#### LAYOUT:

Up to 48 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

Splice Box with lid and LC Duplex Couplers, 1 PG 13.5 screw connection, Packed in a box

UPTICAL FEATURES	
IL AT MULTIMODE:	Max. 0,4 dB
IL AT SINGLEMODE:	Max. 0,5 dB (PC); max. 0,3 dB (APC)
RL AT MULTIMODE:	Min. 30 dB
RL AT SINGLEMODE:	Min. 40 dB (PC); min. 60 dB (APC)

#### THERMAL FEATURES

ODTICAL FEATURES

OPERATING TEMP.: -2 STORAGE TEMP.: -4

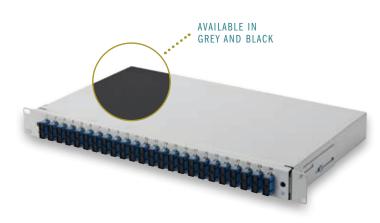
-20° C / +80° C -40° C / +90° C

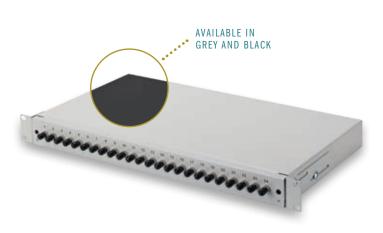
SPLICE BOX, EQUIPPED WITH LC/DX COUPLERS AND PIGTAIL SETS			
	6 LC Couplers	12 LC Couplers	24 LC Couplers
0M2	DN-96330	DN-96331	DN-96332
0М3	DN-96330/3	DN-96331/3	DN-96332/3
0М4	DN-96330-4	DN-96331-4	DN-96332-4
0S2	DN-96330/9	DN-96331/9	DN-96332/9

SPLICE	SPLICE BOX, PARTIALLY EQUIPPED WITH LC/DX COUPLERS		
	6 LC Couplers	12 LC Couplers	24 LC Couplers
0M2	DN-96430	DN-96431	DN-96432
0M3	DN-96430/3	DN-96431/3	DN-96432/3
0М4	DN-96430-4	DN-96431-4	DN-96432-4
<b>0</b> S2	DN-96430/9	DN-96431/9	DN-96432/9

# DIGITUS<sup>®</sup> Professional SPLICE BOX, EQUIPPED WITH SC DUPLEX COUPLERS

# DIGITUS<sup>®</sup> Professional SPLICE BOX, EQUIPPED WITH ST DUPLEX COUPLERS





#### PRODUCT INFORMATION

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44,45 mm (1U) $\times$ 483 mm (19") $\times$ 280 mm

#### HOUSING:

Full metal varnished light grey (RAL 7035) or black (RAL 9005, please add an -B behind the article number), Numbers as screen printing

#### FRONT PLATE:

483 mm (19") with mounted SC Duplex Couplers (plastic housing)

#### LAYOUT:

Up to 48 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

Splice Box with lid and SC Duplex Couplers, 1 PG 13.5 screw connection, Packed in a box

SPLICE BOX WITH SC/DX COUPLERS AND PIGTAIL SETS			
	6 SC Couplers	12 SC Couplers	24 SC Couplers
0M2	DN-96320	DN-96321	DN-96322
0М3	DN-96320/3	DN-96321/3	DN-96322/3
0М4	DN-96320-4	DN-96321-4	DN-96322-4
0S2	DN-96320/9	DN-96321/9	DN-96322/9

SPLICE BOX WITH SC/DX COUPLERS			
	6 SC Couplers	12 SC Couplers	24 SC Couplers
0M2	DN-96420	DN-96421	DN-96422
0М3	DN-96420/3	DN-96421/3	DN-96422/3
0М4	DN-96420-4	DN-96421-4	DN-96422-4
0S2	DN-96420/9	DN-96421/9	DN-96422/9

#### **PRODUCT INFORMATION**

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44,45 mm (1U)  $\times$  483 mm (19")  $\times$  280 mm

#### HOUSING:

Full metal varnished light grey (RAL 7035) or black (RAL 9005, please add an -B behind the article number), Numbers as screen printing

#### FRONT PLATE:

483 mm (19") with mounted LC Duplex

#### LAYOUT:

Up to 48 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

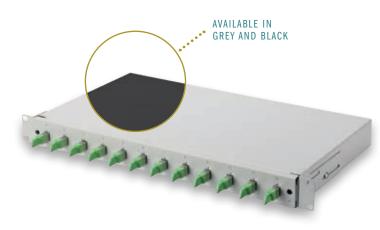
Splice Box with lid and ST Duplex Couplers, 1 PG 13.5 screw connection, Packed in a box

SPLICE BOX WITH ST/SX COUPLERS AND PIGTAIL SETS			
	6 ST Couplers	12 ST Couplers	
0M2	DN-96311	DN-96312	
0М3	DN-96311/3	DN-96312/3	
0М4	DN-96311-4	DN-96312-4	
0S2	DN-96311/9	DN-96312/9	

SPLICE BOX WITH ST/SX COUPLERS		
	6 ST Couplers	12 ST Couplers
0M2	DN-96411	DN-96412
0М3	DN-96411/3	DN-96412/3
OM4	DN-96411-4	DN-96412-4
0S2	DN-96411/9	DN-96412/9

## DIGITUS\* Professional SPLICE BOX, EQUIPPED WITH E2000 SIMPLEX COUPLERS

# DIGITUS<sup>®</sup> Professional SPLICE BOX, EQUIPPED WITH LC DUPLEX COUPLERS





#### PRODUCT INFORMATION

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44.45 (1U)  $\times$  483 (19")  $\times$  280 mm

#### HOUSING:

Full metal varnished light grey (RAL 7035) or black (RAL 9005, please add an -B behind the article number), Numbers as screen printing

#### FRONT PLATE:

483 mm (19") with mounted LC Duplex Couplers (plastic housing)

#### LAYOUT:

Up to 24 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

Splice Box with lid and E2000 Simplex Couplers,

1 PG 13.5 screw connection, Packed in a box

SPLICE BOX WITH E2000/SX COUPLERS AND PIGTAIL SETS			
	12 × E2000 Couplers	24 × E2000 Couplers	
0M2	DN-96341	DN-96342	
<b>OM3</b>	DN-96341/3	DN-96342/3	
0М4	DN-96341-4	DN-96342-4	
<b>0S2</b>	DN-96341-9	DN-96342/9	

SPLICE BOX, PARTIALLY EQUIPPED WITH ST/SX COUPLERS		
	12 × E2000 Couplers	24 × E2000 Couplers
0M2	DN-96441	DN-96442
0M3	DN-96441/3	DN-96442/3
0М4	DN-96441-4	DN-96442-4
<b>0</b> S2	DN-96441-9	DN-96442/9

#### **PRODUCT INFORMATION**

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44.45 (1U)  $\times$  483 (19")  $\times$  280 mm

#### HOUSING:

Aluminum unpainted; steel front panel painted

#### FRONT PLATE:

483 mm (19") with mounted LC Duplex Couplers (plastic housing)

#### LAYOUT:

**0S2** 

Up to 48 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

DN-96330/9-AL

Splice Box with lid and LC Duplex Couplers, 1 PG 13.5 screw connection, Packed in a box

SPLICE BOX, EQUIPPED WITH LC/DX COUPLERS AND PIGTAIL SETS				
6 LC Couplers 12 LC Couplers		24 LC Couplers		
0M2	DN-96330-AL	DN-96331-AL	DN-96332-AL	
<b>OM3</b> DN-96330/3-AL	DN-96331/3-AL	DN-96332/3-AL		
0М4	DN-96330-4-AL	DN-96331-4-AL	DN-96332-4-AL	

DN-96331/9-AL

DN-96332/9-AL

SPLICE BOX, PARTIALLY EQUIPPED WITH LC/DX COUPLERS			
	6 LC Couplers	12 LC Couplers	24 LC Couplers
0M2	DN-96430-AL	DN-96431-AL	DN-96432-AL
<b>OM3</b>	DN-96430/3-AL	DN-96431/3-AL	DN-96432/3-AL
OM4	DN-96430-4-AL	DN-96431-4-AL	DN-96432-4-AL
<b>0</b> S2	DN-96430/9-AL	DN-96431/9-AL	DN-96432/9-AL

## DIGITUS® Professional SPLICE BOX, EQUIPPED WITH SC DUPLEX COUPLER

## DIGITUS<sup>®</sup> Professional SPLICE BOX ASSEMBLED WITH UP TO 4 DIFFERENT FRONT-PLATES, HYBRID





#### PRODUCT INFORMATION

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44.45 (1U) $\times$ 483 (19") $\times$ 280 mm

#### HOUSING:

Aluminum unpainted; steel front panel painted

#### FRONT PLATE:

483 mm (19") with mounted SC Duplex Couplers (plastic housing)

#### LAYOUT:

Up to 48 fibers / 4× splice cassettes

#### SCOPE OF DELIVERY AND PACKAGING

Splice Box with lid and SC Duplex Couplers,

1 PG 13.5 screw connection, Packed in a box

SPLICE BOX, EQUIPPED WITH SC/DX COUPLERS AND PIGTAIL SETS				
	6 SC Couplers	12 SC Couplers	24 SC Couplers	
0M2	DN-96320-AL	DN-96321-AL	DN-96322-AL	
<b>0M3</b>	DN-96320/3-AL	DN-96321/3-AL	DN-96322/3-AL	
0М4	DN-96320-4-AL	DN-96321-4-AL	DN-96322-4-AL	
<b>0</b> S2	DN-96320/9-AL	DN-96321/9-AL	DN-96322/9-AL	

SPLICE BOX, PARTIALLY EQUIPPED WITH SC/DX COUPLERS				
	6 SC Couplers	12 SC Couplers	24 SC Couplers	
0M2	DN-96420-AL	DN-96421-AL	DN-96422-AL	
0М3	DN-96420/3-AL	DN-96421/3-AL	DN-96422/3-AL	
0М4	DN-96420-4-AL	DN-96421-4-AL	DN-96422-4-AL	
0S2	DN-96420/9-AL	DN-96421/9-AL	DN-96422/9-AL	

#### **PRODUCT INFORMATION**

Cable strap and PG screw connection, 4 possible entries with PG screw connection, Measurements (HxWxD): 44.45 (1U) $\times$ 483 (19") $\times$ 280 mm

#### HOUSING:

Full metal varnished light grey (RAL 7035) or black (RAL 9005, please add an -B behind the article number), Numbers as screen printing

#### FRONT PLATE:

for: LC Duplex, SC Duplex, SC Simplex, ST Simplex, Keystone Module

#### LAYOUT:

4 possible entries with PG screw connection

#### SCOPE OF DELIVERY AND PACKAGING

Splice Box with Frontplate-Holder for 4 Frontplates, 1 PG 13.5 screw connection, Packed in a box

FRONT PLATE:			
6 ST/SX	DN-96204-H		
6 LC/DX oder SC/SX	DN-96206-H		
6 SC/DX	DN-96202-H		
4 Keystone RJ45	DN-96209-H		

PRODUCT NUMBER	
Fiber Optic Splice Box	DN-96200-H



# **DATA PROTECTION**

# More than a virtual challenge

Physical protection measures are just as important as the virtual ones in the data center. Data center operators setup different security zones for this purpose. Each area has its own security concept. From the outside, through the office spaces to the core of the data center - with the WDR cameras, DIGITUS<sup>®</sup> Professional offers you high-quality equipment for monitoring your data center.

# PROTECTION ZONE 1 ······

Entrance to buildings with data center

FIRE PROTECTION: No special requirements

## PROTECTION ZONE 2 ······

Access/entrance protection zone 2, external security rooms, data center entrance, data center offices, storage rooms, test/configuration rooms

#### FIRE PROTECTION:

Fire alarm system, fire extinguishing system optional, F60 (EN 1634)

# **PROTECTION ZONE 3** .....

Server rooms, surveillance rooms, data center, security rooms, conference rooms

#### FIRE PROTECTION:

Fire alarm system, fire detection, fire extinguishing system, F90 (EN 1634), EN 1047-2

## **PROTECTION ZONE 4** ······

Special sections within the server rooms

#### FIRE PROTECTION:

Fire alarm system, fire detection, fire extinguishing system, F90 (EN 1634), EN 1047-2

SECURITY

For more information on the WDR security cameras from DIGITUS\* Professional, please visit: www.digitus-professional.com

# Crystal-clear images in any lighting thanks to WDR technology

**DIGITUS**\* **WDR cameras** are designed for **high-contrast light conditions** in high-security areas where a high degree of identification is required, and are therefore ideal for intelligent video analysis applications.

**802.3af Power over Ethernet (PoE)** makes installing the camera close to a **power outlet unnecessary,** since both data and power are transmitted over the twisted pair cable.

**DIGITUS\* WDR cameras** are equipped with a **built-in microSD/SDHC card slot** for local storage and digital input/output (1DI/1D0) for alarm and sensor contacts.

In addition, the DIGITUS<sup>®</sup> standalone network offers you **video recorders (NVR)** that are tailored to the DIGITUS<sup>®</sup> camera portfolio.

So you get an intelligent video surveillance system.

# FIBER OPTIC Solutions for predictive data analysis in real-time

The requirements for a data center are constantly increasing. More and more data should be available in an ever shorter time. In the 1980s, the standard requirement for a data center was still 1



GBase-s. Today, data center operators worldwide are faced with a real flood of data, which quickly rose to the trillions. The trend goes from mere management of Big Data to predictive analysis. Companies want to evaluate, analyze and make statements based on their data models on, for example, economic contexts, the stored data. So you will improve your service and gain a real competitive advantage. This only works if companies can work with their data and programs in real-time and do not have to invest much more for new solutions.

Fiber optic installations meet both requirements: You can reduce the very high cost

of building infrastructure and cooling and provide a higher data transfer speed. For example, DIGITUS<sup>®</sup> Professional offers you **MTP<sup>®</sup>/MPO plugs with a 12 or 24-core cable.** Even now, **up to 100 GB of data** can be transmitted over the OM5 fiber.

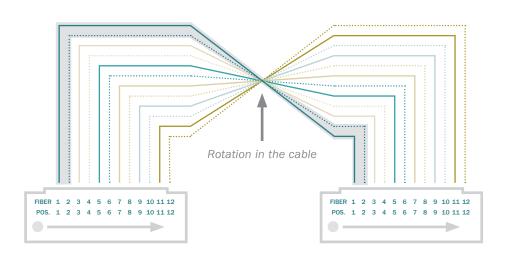


#### Light speed alone is no longer enough

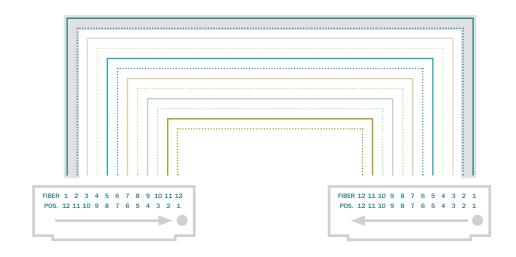
But at the end of this decade, we already have to get it to transfer over 400 GB. With DIGITUS<sup>®</sup> Professional, you can already lay the foundation for parallel optical transmission today, where data is transmitted **over 4 fibers at the same time.** 

MTP°/MPO cables are available in 3 different variants:

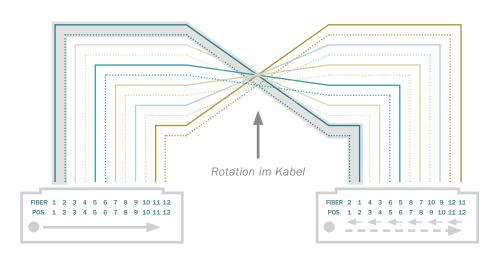
#### **METHOD A**



#### **METHOD B**

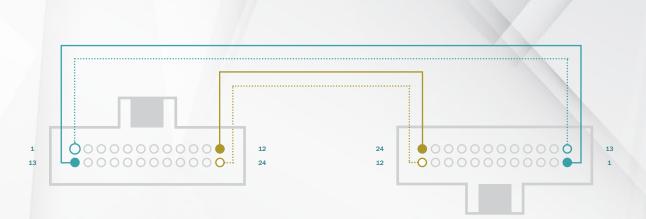


**METHOD C** 



#### **FIBER OPTIC CABLE**

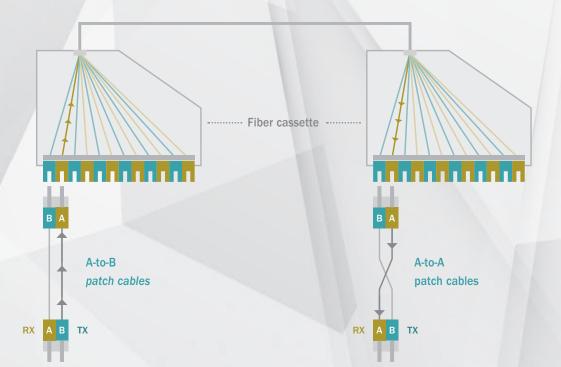
We come into the dimension of a 24-core cable, the individual levels in the plug become relevant. In method A, Pin1 is no longer connected to Pin1. Instead, pin 1 is connected to pin 13 and pin 12 to pin 24 of the opposite side.



Since we normally work with a transmitter (TX) and a receiver (RX), one rotation should take place at one point. The following products are available to incorporate this rotation:

- the patch cable
- the fanout cassette
- the MPO cable

#### **ROTATION OF PATCH CABLES**



# DIGITUS\* Professional **MPO/MTP\* PATCH CABLE**





# PRODUCT INFORMATION

The MPO/MTP<sup>\*</sup> cable is designed for system solutions in data centers. This Fiber optic cable is typically equipped with 12 or 24 fibers. The plug you can get as a PC or as APC, with an usual attenuation of 0.3 dB. This cable is available as Trunk or round cable. MPO/MPT<sup>\*</sup> plugs are available as male and female. MPO cables are also often combined with LC or SC connectors.

Our DIGITUS\* Professional MPO/MTP\* cables all meet the standard IEC61754-7 and the standard EN 50173-5. To insert the MPO/MPT\* cables in the data center, they are either used as normal Uplink with same connectors or as fan-out with LC or SC couplers. Of course you can use boxes for installation in the rack. One Side contains the MPO/MPT\* connection and on the other side are the SC or LC Couplers. The cables are available as OS2 and as OM2, OM3 and OM4 version.

#### MECHANICAL FEATURES

PLUG:	MPO female
CABLE:	$\emptyset$ 4.5 mm $\pm$ 0.2 mm, halogen-free (12 fibers) 7.5 $\times$ 4,5 mm $\pm$ 0.2 mm, halogen-free (24 fibers)
PULLING FORCE:	Aramid (Kevlar)
PLUG CYCLES:	≥ 500
POLARITY:	Тур А
BENDING RADIUS:	15× outer diameter
FAN-OUT-CABLE:	0,9 mm

#### OPTICAL FEATURES

IL AT MULTIMODE:	Max. 0,4 dB
IL AT SINGLEMODE:	Max. 0,5 dB (PC); max. 0,3 dB (APC)
RL AT MULTIMODE:	Min. 30 dB
RL AT SINGLEMODE:	Min. 60 dB (APC)

#### THERMAL FEATURES

OPERATING TEMP.:	-40° C / +75° C
STORAGE TEMP.:	-40° C / +75° C

PRODUCT NUMBER				
	MPO to MPO	MPO to LC	MPO to SC	
0M2	DK-25662-xx	DK-25631-xx	DK-25621-xx	
0M3	DK-25662-xx-3	DK-25631-xx-3	DK-25621-xx-3	
0М4	DK-25662-xx-4	DK-25631-xx-4	DK-25621-xx-4	
OM5	DK-25662-xx-5	DK-25631-xx-5	DK-25621-xx-5	
<b>0</b> S2	DK-29662-xx	DK-29631-xx	DK-29621-xx	

Choose a length for the xx within the article number. For example 5 m OM3 = DK-25662-05-3

# 

#### PRODUCT INFORMATION

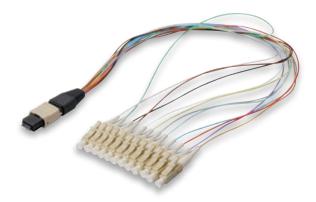
This MPO/MTP<sup> $\circ$ </sup> cable is the revolution in the data center. Available is OM5 cable with 12 or 24 fibers. Through opening of the wideband window from 850 nm to 950 nm now 100G can be transferred over one fiber. For 400G you only need 4 fibers. You can read more about the OM5 fiber on page 37.

PRODUCT NUMBE	R					
	MPO to MPO	MPO to LC	MPO to SC			
0M5	DK-25662-xx-5	DK-25631-xx-5	DK-25621-xx-5			
Choose a length for the xx within the article number. For example 5 m $OM5 = DK-25662-05-5$						

#### DIGITUS\* Professional MPO/MTP\* TRUNK CABLES



## DIGITUS<sup>®</sup> Professional MPO/MTP<sup>®</sup>-LC/SC FAN-OUT CABLES



#### PRODUCT INFORMATION

Best performance and link quality for your network.

#### MECHANICAL FEATURES

PLUG:	MPO/MTP°/APC/SM
CABLE:	Trunk cable/12C SM/0M4/Fiber 9/125

#### OPTICAL FEATURES

IL MPO:	> 0.5 dB
COLOR:	Aqua

#### PRODUCT INFORMATION

Best performance and link quality for your network.

#### MECHANICAL FEATURES

PLUG:	MPO/PC - LC/SC, PC/MM/0.9
CABLE:	Trunk cable/OM4/LSZH
OPTICAL FEATURE	S
IL BEI MPO:	> 0.5 dB
IL BEI SC:	> 0.3 dB

# PRODUCT NUMBER

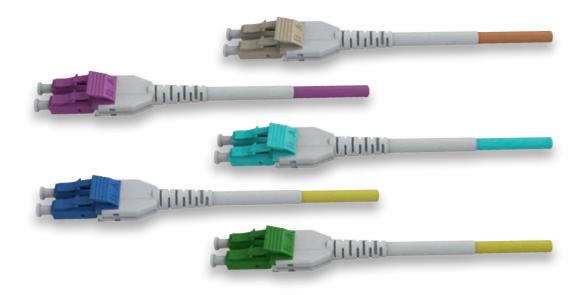
PRODUCT NUMBER	1	
	MPO male to MPO female	
0M2	DK-29662-xx	
0М4	DK-25662-xx-4	
Choose	a length for the xx within the article number	

hoose a length for the xx within the article number. For example 5 m OM4 = DK-29662-05-4

PRODUCT NUMBE	R	
	MPO to 12 LC	MPO to 12 SC
0М4	DK-25631-xx-4	DK-25621-xx-4
0M2	DK-29631-xx	

Choose a length for the xx within the article number. For example 5 m OM4 = DK-25631-05-4 10

# DIGITUS<sup>®</sup> Professional UNIBOOT PATCH CABLE



#### PRODUCT INFORMATION

The Uniboot patch cable improves the handling in applications with high packing density. With Uniboot patch cables you create more space in your rack and the ventilation is improved. The 2 mm dual-fiber cable is particularly suitable for easy cable management.

.....

#### SCOPE OF DELIVERY AND PACKAGING

Packed in polybag with measurement report

#### MECHANICAL FEATURES

CONNECTOR:	Ceramic ferrule
CABLE:	Ø 2 mm LSZH (halogen-free)
CONSTRUCTION:	LC (IEC 61754-20)

PLUG CYCLES:	≥ 500	
BEND RADIUS:	3,8 cm	
OPTICAL FEATURES		
TYPICAL INSERTION LOS	S:	≤ 0,20 dB
MAX. INSERTION LOSS:		≤ 0,25 dB
DURABILITY (500 MATIN	G TIMES ):	$\Delta I.L. \leq 0,25 \text{ dB}$
THERMAL FEATURES		
OPERATING TEMP.: -	20° C / +7	5° C

-20° C / +85° C

PRODUC	T NUMBER				
		Multimode		Single	emode
	OM2 - 50/125 μ	OM3 - 50/125 μ	OM4 - 50/125 μ	<b>0S2</b> - <b>50/125</b> μ	<b>0S2 APC - 50/125 μ</b>
<b>1,0 m</b>	DK-UB2533-01	DK-UB2533-01/3	DK-UB2533-01-4	DK-UB2933-01	DK-UB293LCA3LCA-01
2,0 m	DK-UB2533-02	DK-UB2533-02/3	DK-UB2533-02-4	DK-UB2933-02	DK-UB293LCA3LCA-02
3,0 m	DK-UB2533-03	DK-UB2533-03/3	DK-UB2533-03-4	DK-UB2933-03	DK-UB293LCA3LCA-03
5,0 m	DK-UB2533-05	DK-UB2533-05/3	DK-UB2533-05-4	DK-UB2933-05	DK-UB293LCA3LCA-05
7,0 m	DK-UB2533-07	DK-UB2533-07/3	DK-UB2533-07-4	DK-UB2933-07	DK-UB293LCA3LCA-07
<b>10,0</b> m	DK-UB2533-10	DK-UB2533-10/3	DK-UB2533-10-4	DK-UB2933-10	DK-UB293LCA3LCA-10
	<b>0M2 - G50/125 μ</b>	0M3 - G50/125 μ	OM4 - G50/125 μ	<b>0S2 APC - E9/125 μ</b>	
XX m	DK-UB2533-XX	DK-UB2533-xx/3	DK-UB2533-xx-4	DK-UB2933-xx	

STORAGE TEMP.:

Choose a length for the xx within the article number. For example 5 m OM3 = DK-UB2533-05/3

#### DIGITUS<sup>®</sup> Professional





#### PRODUCT INFORMATION .....

DIGITUS® Professional breakout cables are constructed of up to 24.2 mm simplex cables stranded around a central strength member. Each simplex has its own aramid yarn strength member and jacket. These sub units are wrapped in a polyester tape and jacketed in LSZH.

#### THERMAL FEATURES .....

OPERATING TEMP.:	-20° C ~ +60° C
STORAGE TEMP.:	-20° C ~ +60° C
INSTALLATION TEMP.:	-20° C ~ +60° C



TECHNICAL PROPERTIES		4 Fibers LSZH	6 Fibers LSZH	8 Fibers LSZH	12 Fibers LSZH	24 Fibers LSZH
OUTER DIAMETER	mm	7,0	8,2	9,4	11,8	14,1
WEIGHT:	kg/km	46	63	86	139	159
MAX. LOAD (INSTALLATION):	Ν	500	1000	1100	1400	2300
MAX. LOAD (INSTALLED):	Ν	270	600	700	800	1100
MIN. BEND RADIUS (INSTALLATION):	mm	140	160	190	240	280
MIN. BEND RADIUS (INSTALLED):	mm	70	80	95	120	140
FIRE PERFORMANCE:					LSZH	LSZH
CRUSH RESISTANCE:	N/100mm	1000	1000	1000	1000	1000



DIGITUS

## PRODUCT NUMBER

Singlemode Breakout	Cables // SM G.65					
1. Connector	4 Fibers	6 Fibers	8 Fibers	12 Fibers	24 Fibers	2. Connector
SC	DK-B290420-XX	DK-B290620-XX	DK-B290820-XX	DK-B291220-XX	DK-B292420-XX	open
SC	DK-B290422-XX	DK-B290622-XX	DK-B290822-XX	DK-B291222-XX	DK-B292422-XX	SC
LC	DK-B290430-XX	DK-B290630-XX	DK-B290830-XX	DK-B291230-XX	DK-B292430-XX	open
LC	DK-B290433-XX	DK-B290633-XX	DK-B290833-XX	DK-B291233-XX	DK-B292433-XX	LC
E 2000 E 2000	DK-B290440-XX DK-B290444-XX	DK-B290640-XX DK-B290644-XX	DK-B290840-XX DK-B290844-XX	DK-B291240-XX DK-B291244-XX	DK-B292440-XX DK-B292444-XX	open E 2000
ST	DK-B290410-XX	DK-B290610-XX	DK-B290810-XX	DK-B291210-XX	DK-B292410-XX	open
ST	DK-B290411-XX	DK-B290611-XX	DK-B290811-XX	DK-B291211-XX	DK-B292411-XX	ST
FC	DK-B290450-XX	DK-B290650-XX	DK-B290850-XX	DK-B291250-XX	DK-B292450-XX	open
FC	DK-B290455-XX	DK-B290655-XX	DK-B290855-XX	DK-B291255-XX	DK-B292455-XX	FC
Multimode Breakout C	ables // 50/125 0M2					
1. Connector	4 Fibers	6 Fibers	8 Fibers	12 Fibers	24 Fibers	2. Connector
SC / PC	DK-B250420-XX/4	DK-B250620-XX/4	DK-B250820-XX/4	DK-B251220-XX/4	DK-B252420-XX/4	open
SC / PC	DK-B250422-XX/4	DK-B250622-XX/4	DK-B250822-XX/4	DK-B251222-XX/4	DK-B252422-XX/4	SC / PC
LC / PC	DK-B250430-XX/4	DK-B250630-XX/4	DK-B250830-XX/4	DK-B251230-XX/4	DK-B252430-XX/4	open
LC / PC	DK-B250433-XX/4	DK-B250633-XX/4	DK-B250833-XX/4	DK-B251233-XX/4	DK-B252433-XX/4	LC / PC
E 2000 / PC	DK-B250440-XX/4	DK-B250640-XX/4	DK-B250840-XX/4	DK-B251240-XX/4	DK-B252440-XX/4	open
E 2000 / PC	DK-B250444-XX/4	DK-B250644-XX/4	DK-B250844-XX/4	DK-B251244-XX/4	DK-B252444-XX/4	E 2000 / PC
ST / PC	DK-B250410-XX/4	DK-B250610-XX/4	DK-B250810-XX/4	DK-B251210-XX/4	DK-B252410-XX/4	open
ST / PC	DK-B250411-XX/4	DK-B250611-XX/4	DK-B250811-XX/4	DK-B251211-XX/4	DK-B252411-XX/4	ST / PC
FC / PC	DK-B250450-XX/4	DK-B250650-XX/4	DK-B250850-XX/4	DK-B251250-XX/4	DK-B252450-XX/4	open
FC / PC	DK-B250455-XX/4	DK-B250655-XX/4	DK-B250855-XX/4	DK-B251255-XX/4	DK-B252455-XX/4	FC / PC

## OM5 OPENS THE WINDOW TO USE IT

Until now there have been multimode fiber types OM1 with 62  $\mu$ m and OM2; OM3 and OM4 with 50  $\mu$ m. All of these provide transmission in the wavelength range of 850 nm. This limitation of range and transmission speed is now being revolutionized by the OM5 fiber, which is referred to as a WideBand Multimode Fiber. Until now, parallel optical transmission has been used to transmit a higher data rate.

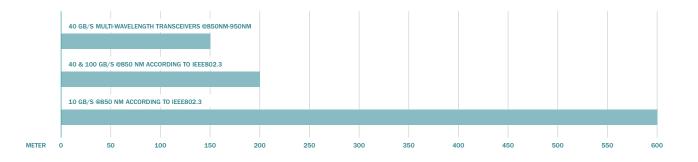
In this modality, multiple fibers are used to transmit the data simultaneously. This fragmentation of the data is now being optimized further. OM3 and OM4 fibers have been produced for the transmission window of 850 nm. With the OM5 fiber, the range from 850-950 nm wavelengths is now being produced in such a way as to extend the transmission to 4 wavelengths.

Thus, per wavelength up to 25 Gbps can be transmitted and 100 Gbps over one fiber, and at a distance of 150 m. Since the fiber is also compatible with OM3 and OM4, it can transmit data up to 200 m in the 850 nm waveband. Our DIGITUS<sup>\*</sup> OM5 patch and MPO cables conform to the TIA-492AAAE and IEC 60793-2-10 V. 6 fiber specification.

CHARACTERISTIC	CONDITION	SPECIFICATION	UNIT
Fiber diameter		50 +/- 2,5	μm
Cladding diameter		125 +/- 0,8	μm
Attenuation	850 nm	≤ 2,4	dB/km
	953 nm	≤ <b>1</b> ,7	dB/km
	1300 nm	≤ 0,6	dB/km
Overfilled modal bandwidth	850 nm	≥ 3500	MHz×km
	953 nm	≥ 1850	MHz×km
	1300 nm	≥ 500	MHz×km
Effective modal	850 nm	≥ 4700	MHz×km
bandwidth	953 nm	≥ 2470	MHz×km
40 Gb/s multi- wavelength transceivers	850-950 nm	150	m
40 & 100 Gigabit Ethernet	850 nm	200	m
100 BASE-SR	850 nm	600	m
1000 BASE-SX	850 nm	1100	m

## Features:

- Designed for multi-wavelength systems
- Compatible with OM3 and OM4
- Very small macrobending sensitivity
- Duplex transmission of 40/100/400 GBws with SWDM (short wave division multiplexing)



# COPPER

## The classic in data center cabling

Let's be honest. Copper is still the most widely-used medium for data transmission in data centers today. You benefit from the unbeatable price and solid performance of this classic as a data center operator, also during optical transmission. The RJ45 plug provides a reliable standard. Cables should be installed quickly and with little effort.

The development of Power over Ethernet (PoE) has also made copper cables shine again in the recent past. Because in addition to data, copper also conducts electricity and thus supplies end devices with the necessary power over the data cable.

## High-speed networks with copper – Cat. 8 makes it possible

Our experts agree: Structured copper cabling systems will also accompany us in the years to come. There will also be suitable solutions in the future for the 40 GBase-T or even the 100 GBase-T requirement. Now, we can already supply you a Cat. 8 cable! The development of the plug is imminent. The Cat. 8 cable (DK-1843-VH-X) is available as class II (40 Gbase-T, 2 GHz) in the 2000 MHz variant. Using GG45 Nexans modules and GG45 Nexans patch cables, the cable transmits 40 GBase-T over a length of 30 meters, alternatively with Siemon Terra modules and patch cables.

Challenge for the future: We make no secret of it. Currently, cables and plugs can be offered, but the standard has not yet been finalized and confirmed.

DIGITUS<sup>®</sup> Professional monitors the development of the new Category 8 with enthusiasm and will gladly inform you about the new top specification.

## THE CAT. 8 CATEGORY CAN BE DIVIDED INTO TWO CLASSES:

### CLASS 1:

- 1600 MHz U/FTP cable design
- American design
- Measurement standards lower than Class II
- Connector face (socket and plug) design on
- RJ45 tuned socket and plug ARJ45, if necessary
- Standards come with the new ISO/IEC 11801 3rd Edition

## CLASS 2:

- Class II 2000 MHz S/FTP cable design
- European design
- Measurement standards higher than Class I
- Connector face (socket and plug) GG45, Terra, BKS
- Standards come with the new ISO/IEC 11801 3rd Edition

## DIGITUS® Professional CAT 8.2, S/FTP TWISTED-PAIR INSTALLATION CABLE

## DIGITUS<sup>®</sup> Professional CAT 7<sub>A</sub>, S/FTP TWISTED-PAIR INSTALLATION CABLE









#### PRODUCT INFORMATION

2000 MHz, Color yellow (RAL 1016)

#### AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T; 40 GBase-T, IEEE 802.5 16 MB; ISDN; TPDDI; ATM; CATV; PoE/PoE+ (IEEE 802.3af; 3at; 3 bt)

### NORMS

ISO/IEC 11801 2nd Ed.; IEC 61156-5; IEC 61156-9; EN 50173; EN 50288-9-1

#### FLAME RETARDANCY

IEC 60332-3-24; IEC 60754-2; IEC 61034; D<sub>ca</sub>

#### TECHNICAL PROPERTIES

BASIC CONDUCTOR:	Solid AWG 22/1, bare annealed copper, diameter 0.62 mm nominal
INSULATION:	SFS-PE (Foam-Skin Polyethylene)
TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs
INDIVIDUAL PAIR Shielding:	Aluminum foil, providing 100% coverage
OVERALL SHIELDING:	50% wire braid, copper drain wire

#### MECHANICAL FEATURES

TENSILE LOADING:	150 N max.
BENDING RADIUS:	Dynamic: 8 × AD mm min.
	Static: $4 \times AD$ mm min.
OUTER DIAMETER:	7,8 mm nominal
WEIGHT:	70 kg/km

PRODUCT NUMBER	DESCRIPTION
DK-1843-VH-5	Simplex, 500 m drum
DK-1843-VH-10	Simplex, 1000 m drum

#### PRODUCT INFORMATION

1500 MHz, Color yellow (RAL 1016)

#### AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T IEEE 802.5: 16 MB; ISDN; FDDI; ATM; CATV; Broadband video; PoE/PoE+

## NORMS

ISO/IEC 11801 2nd Ed.; IEC 61156-5, EN 50173-1/4; EN 50288-9-1

#### FLAME RETARDANCY

IEC 60332-3-24; IEC 60754-2; IEC 61034; D<sub>ca</sub>

#### TECHNICAL PROPERTIES

BASIC CONDUCTOR:	Solid AWG 22/1, bare annealed copper, diameter 0.60 mm nominal
INSULATION:	SFS-PE (Foam-Skin Polyethylene)
TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs
INDIVIDUAL PAIR Shielding:	Aluminum foil, providing 100% coverage
OVERALL SHIELDING:	50% wire braid
MECHANICAL FEATURES	
TENSILE LOADING:	150 N max.
BENDING RADIUS:	Dynamic: 8× AD mm min.
	Static: $4 \times AD$ mm min.
OUTER DIAMETER:	7.3 mm nominal
WEIGHT:	70 kg/km

PRODUCT NUMBER	DESCRIPTION
DK-1743-A-VH-5	Simplex, 500 m drum
DK-1743-A-VH-10	Simplex, 1000 m drum
DK-1743-A-VH-D-5	Duplex, 500 m drum

## DIGITUS<sup>®</sup> Professional CAT 7, S/FTP TWISTED-PAIR INSTALLATION CABLE



## DIGITUS<sup>®</sup> Professional CAT 7, S/FTP MULTI-PAIR TRUNK CABLE, BULK GOODS 7 🚇 📭 💭





6-way Trunk

12-way Trunk





## PRODUCT INFORMATION

1200 MHz, Color orange (RAL 2000)

## AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T IEEE 802.5: 16 MB; ISDN; FDDI; ATM; PoE/PoE+

### NORMS

ISO/IEC 11801 2nd Ed.; IEC 61156-5, EN 50173-1; EN 50288-4-1

.....

## FLAME RETARDANCY

IEC 60332-3-24; IEC 60754-2; IEC 61034; D<sub>ca</sub>

### **TECHNICAL PROPERTIES**

٠		
	BASIC CONDUCTOR:	Solid AWG 23/1, bare annealed copper, diameter 0.57 mm nominal
	INSULATION:	SFS-PE (Foam-Skin Polyethylene)
	TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs
	INDIVIDUAL PAIR Shielding:	Aluminum foil, providing 100% coverage
	OVERALL SHIELDING:	35% wire braid

## MECHANICAL FEATURES

TENSILE LOADING:	150 N max.
BENDING RADIUS:	Dynamic: 8× AD mm min.
	Static: 4× AD mm min.
OUTER DIAMETER:	7.3 mm nominal
WEIGHT:	50 kg/km

PRODUCT NUMBER	DESCRIPTION
DK-1743-VH-5	Simplex, 500 m drum
DK-1743-VH-10	Simplex, 1000 m drum
DK-1743-VH-D-5	Duplex, 500 m drum

## PRODUCT INFORMATION

1200 MHz, Color turquoise (RAL 6027)

## AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T IEEE 802.5 16 MB; ISDN; FDDI; ATM; PoE/PoE+

#### NORMS

ISO/IEC 11801 2nd Ed.; IEC 61156-5, EN 50173; EN 50288-4-1

## FLAME RETARDANCY

DK-1743-x: IEC 60332-3-24; IEC 60754-2; IEC 61034; D<sub>ca</sub>

### **TECHNICAL PROPERTIES**

BASIC CONDUCTOR:	Solid AWG 23/1, bare annealed copper, diameter 0.56 mm nominal	
INSULATION:	FMPE	
TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs	
INDIVIDUAL PAIR Shielding:	Aluminum foil, providing 100% coverage	
OVERALL SHIELDING:	Wire braid, 35% nominal coverage, copper drain wire	
MECHANICAL FEATURES		
TENSILE LOADING:	150 N max.	
BENDING RADIUS:	Dynamic: 8× AD mm min.	
	Static: $4 \times AD$ mm min.	
OUTER DIAMETER:	6 way trunk in batch: 22,0 mm 12 way trunk in batch: 40,0 mm	
WEIGHT:	6 wire: 300 kg/km // 12 wire: 600 kg/km	

PRODUCT NUMBER	DESCRIPTION
DK-1743-6-001-RAW	6-way trunk
DK-1743-12-001-RAW	12-way trunk

## 6/12 IN A SINGLE STROKE -TRUNK CABLES SAVE INSTALLATION TIME





The DIGITUS<sup>®</sup> Professional multi-pair trunk-cables enable you to have a cleanly bundled cable system. The installation cannot be more efficient. The **space-saving** trunk cables offer enough space in your network cabinet for **optimum air circulation**. Heat build-up is reduced, and you will consequently save energy when cooling your computer center.

You can obtain the multi pair trunk cables in the following versions:

- DK-1743-12-001-RAW DIGITUS<sup>®</sup> Professional, CAT 7 S/FTP multi pair trunk cable, 12-fold
- DK-1743-6-001-RAW DIGITUS\* Professional, CAT 7 S/FTP multi pair trunk cable, 6-fold

Also available: CAT 6A U/UTP | F/UTP

## Trunk cables inclusive of measurement and packaging

You can obtain the trunk cables in the quantity and length you require on request. In this way, rack-to-rack or top-to-mid-of-rack cabling will be child's play for you.

**INFO:** Of course, a measuring protocol applies to all trunks that are delivered.

PLEASE NOTE: The prices of trunk cables are quoted on a per meter basis as standard. If you order 1 piece, you will receive exactly 1 meter. So, if you wish to order a 30-meter long trunk in one piece, please select "30 pieces" when ordering.

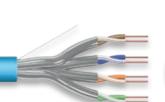
## **COPPER CABLE**



## DIGITUS<sup>\*</sup> Professional CAT 6<sub>A</sub>, U/FTP TWISTED-PAIR INSTALLATION CABLE 6 (1) (2) (2)

## DIGITUS<sup>\*</sup> Professional CAT 6<sub>A</sub>, U/UTP TWISTED-PAIR INSTALLATION CABLE 6<sub>A</sub> ( ) ( )





DIGITUS PROFESSIONAL



PRODUCT INFORMATION

500 MHz, Color light blue (RAL 5012)

## AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T IEEE 802.5: 16 MB; ISDN; FDDI; ATM; PoE/PoE+

## NORMS

ANSI/TIA-568-C; ISO/IEC 11801 2nd Ed.; EN 50173-1; EN 5028811-1; IEC 61156-5

### FLAME RETARDANCY

IEC 60332-1; IEC 60754-2; IEC 61034; E<sub>ca</sub>

#### TECHNICAL PROPERTIES

BASIC CONDUCTOR:	Solid AWG 23/1, bare annealed copper, diameter 0.57 mm nominal
INSULATION:	HD-PE (High Density Polyethylene)
TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs
INDIVIDUAL PAIR Shielding:	Aluminum foil, providing 100% coverage
OVERALL SHIELDING:	Drain wire

#### MECHANICAL FEATURES

TENSILE LOADING:	150 N max.
BENDING RADIUS:	Dynamic: $8 \times AD$ mm min.
	Static: $4 \times AD$ mm min.
OUTER DIAMETER:	7,0 mm nominal
WEIGHT:	50 kg/km

PRODUCT NUMBER	DESCRIPTION
DK-1623-A-VH-305	Simplex, 305 m drum
DK-1623-A-VH-5	Simplex, 500 m drum

### DIGITUS PROFESSIONAL



## PRODUCT INFORMATION

500 MHz, Color Light blue (RAL 5012)

### AREA OF APPLICATION

Primary (Campus), Secondary (Riser), Tertiary (Horizontally) IEEE 802.3: 10 Base-T; 100 Base-T; 100 Base-T; 10 GBase-T IEEE 802.5: 16 MB; ISDN; PoE; PoE+; ATM

## NORMS

ANSI/TIA-568-C; ISO/IEC 11801 2nd Ed.; EN 50173; EN 50288-11-1; IEC 61156-5

### FLAME RETARDANCY

IEC 60332-1; IEC 60754-2; IEC 61034; E<sub>ca</sub>

### TECHNICAL PROPERTIES

BASIC CONDUCTOR:	Solid AWG 23/1, bare annealed copper, diameter 0.55 mm nominal
INSULATION:	HD-PE (High Density Polyethylene)
TOTAL NUMBER OF IN- SULATED CONDUCTORS:	8, twisted in 4 pairs
INDIVIDUAL PAIR Shielding:	None
OVERALL SHIELDING:	None
MECHANICAL FEATURES	
TENSILE LOADING:	150 N max.
BENDING RADIUS:	Dynamic: 8× AD mm min.
	Static: 4 × AD mm min.
OUTER DIAMETER:	7,0 mm nominal

## OUTER DIAMETER: WEIGHT:

PRODUCT NUMBER	DESCRIPTION
DK-1613-A-VH-305	Simplex, 305 m drum
DK-1613-A-VH-5	Simplex, 500 m drum

45 kg/km



CABLE ENTRY IN THE ROOF

THE UNIQUE RANGE OF SERVER CABINETS IN DETAIL:

- Width: 600, 800 mm
- Depth: 1000, 1200 mm
- 26 HE, 36 HE, 42 HE, 47 HE

PROFILE HALF CYLINDER MECHANISM

LOCKING LEVER WITH

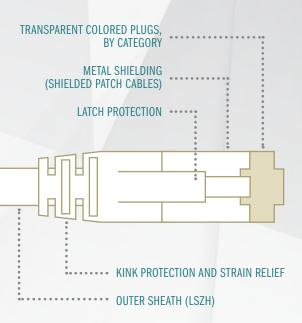
NUMBERED 483 MM (19") PROFILE RAILS

CABLE ENTRY IN THE BOTTOM

## **INTELLIGENT. STABLE. COMPATIBLE.** The DIGITUS<sup>®</sup> Professional server cabinets

DIGITUS<sup>®</sup> Professional offers you 19" server cabinets for your computer center. Regardless of whether it is a small server room or a large computer center, our cabinets offer your customers maximum stability and flexibility. A good cabinet is the basis for every computer center, and with forward-planning, it will remain so for many decades.

## PATCH CABLE



All DIGITUS<sup>®</sup> Professional Patch Cables are ISO certified and meet the requirements acc. to EIA/TIA 568-B. A crossover version is available on request. The patch cables are available in the standard colors (grey, blue, black, green, red, yellow), but also special colors like white, orange, brown, purple, etc. are possible. Don't hestitate to get in touch with us so we can discuss your wishes individually. DIGITUS<sup>®</sup> Professional CAT 6<sub>A</sub>, S/FTP PATCH CABLE 6<sub>A</sub> (LSZH)



## PRODUCT INFORMATION

Transparent yellow colored plug with metal shielding, Boots with kink protection and strain relief, Latch protection

## FLAME RETARDANCY

IEC 60332-1, IEC 61034

FEATURES	
BASIC CONDUCTOR:	Cu, AWG 26/7
SHIELDING:	S/FTP (complete braid shielding, pairs foil shielded)
CONNECTOR:	FCC & IEC 60603-7
STRANDED WIRE:	0,15 +/- 0,002 mm
DIAMETER CABLE JACKET:	5,9 +/- 0,15 mm
ISOLATION STRANDED WIRE:	FO-PE
OPERATING TEMP.:	-20 °C to +60 °C

PRODUCT NUMBER							
	Grey	Blue	Black	Green	Red	Yellow	
0,25 m	DK-1644-A-0025	/B	/BL	/G	/R	/Y	
0,5 m	DK-1644-A-005	/B	/BL	/G	/R	/Y	
<b>1,0</b> m	DK-1644-A-010	/B	/BL	/G	/R	/Y	
2,0 m	DK-1644-A-020	/B	/BL	/G	/R	/Y	
3,0 m	DK-1644-A-030	/B	/BL	/G	/R	/Y	
5,0 m	DK-1644-A-050	/B	/BL	/G	/R	/Y	
7,0 m	DK-1644-A-070	/B	/BL	/G	/R	/Y	
<b>10,0</b> m	DK-1644-A-100	/B	/BL	/G	/R	/Y	
<b>15,0</b> m	DK-1644-A-150	/B	/BL	/G	/R	/Y	
20,0 m	DK-1644-A-200	/B	/BL	/G	/R	/Y	
25,0 m	DK-1644-A-250	/B	/BL	/G	/R	/Y	
30,0 m	DK-1644-A-300	/B	/BL	/G	/R	/Y	

For a different color, please append the letters of the color to the end of the product number - e.g. 5 m black = DK-1644-A-050/BL

## DIGITUS<sup>\*</sup> Professional CAT $6_A$ , S/FTP PATCH CABLE $6_A$ (LS2H)







#### PRODUCT INFORMATION

DRAKA UC900 SS CAT 7 S-FTP PimF, LSZH, Transparent yellow colored TM31 Hirose plug, with metal shielding, Boots with kink protection and strain relief, Latch protection

## FLAME RETARDANCY

IEC 60332-1, IEC 61034

## FEATURES

Cu, AWG 27/7
S/FTP (complete braid shielding, pairs foil shielded)
FCC & IEC 60603-7
0,15 +/- 0,002 mm
5,9 +/- 0,15 mm
FO-PE
-20 °C to +60 °C

## PRODUCT NUMBER

	Grey
0,5 m	DK-1643-A-005
<b>1,0</b> m	DK-1643-A-005
2,0 m	DK-1643-A-010
3,0 m	DK-1643-A-020
5,0 m	DK-1643-A-030
<b>10,0</b> m	DK-1643-A-050
<b>15,0</b> m	DK-1643-A-070
20,0 m	DK-1643-A-100

## PRODUCT INFORMATION

Transparent yellow colored plug, Boots with kink protection and strain relief, Latch protection

## FLAME RETARDANCY

IFC	60332-1,	IFC	61034
IL U	00002-1,	IL U	01004

FEATURES	
BASIC CONDUCTOR:	Cu, AWG 26/7
SHIELDING:	U/UTP (unshielded)
CONNECTOR:	FCC & IEC 60603-7
STRANDED WIRE:	0,155 +/- 0,01 mm
DIAMETER CABLE JACKET:	5,0 +/- 0,2 mm
ISOLATION STRANDED WIRE:	HD-PE
OPERATING TEMP.:	-20 °C to +60 °C

PRODUCT NUMBER							
	Grey	Blue	Black	Green	Red	Yellow	
0,5 m	DK-1613-A-005	/B	/BL	/G	/R	/Y	
<b>1,0</b> m	DK-1613-A-010	/B	/BL	/G	/R	/Y	
2,0 m	DK-1613-A-020	/B	/BL	/G	/R	/Y	
3,0 m	DK-1613-A-030	/B	/BL	/G	/R	/Y	
5,0 m	DK-1613-A-050	/B	/BL	/G	/R	/Y	
7,0 m	DK-1613-A-070	/B	/BL	/G	/R	/Y	
<b>10,0 m</b>	DK-1613-A-100	/B	/BL	/G	/R	/Y	

For a different color, please append the letters of the color to the end of the product number e.g. 5 m black = DK-1613-A-050/**BL**  TE PATCH PAR

ШП

THEFT WILL MILL



## PROJECT BUSINESS -Plan with us

11111

111111

11111

The product manager team from DIGITUS<sup>®</sup> Professional consists of real professionals. We are not theorists, we also feel at home on the construction site. We take part successfully in public tendering and design projects in banks, public authorities, airports, for private computer center operators and many more.

Are you looking for the right cabling for your data center? Are you planning to expand, do you want to increase capacity and what's more, remain economical in the process?

Then do not hesitate to contact us directly. We will be happy to help you find the right product for your project and answer questions about standards and certificates.

We will also gladly organize the transport of the products right up to the construction site of your large project.

6'-6"

1

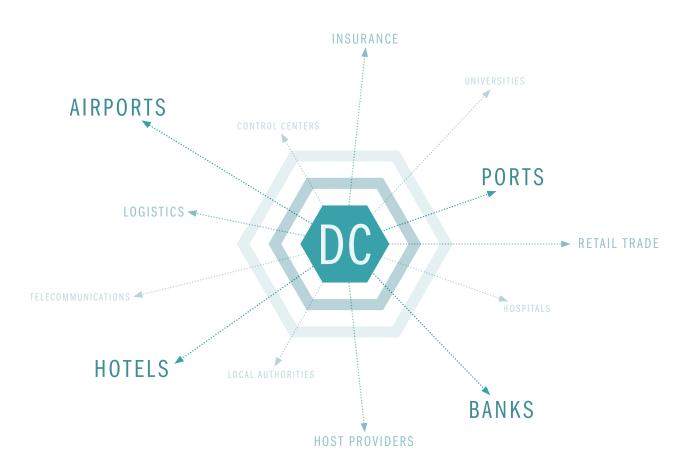
## Final assembly - Count on our touch

Save time and money and allow us, for example, to directly assemble your required splice boxes. DIGITUS<sup>\*</sup> Professional also offers you short delivery times for special customer requirements.

Of course, we go beyond the standard in doing so. You will get assorted boxes, different cable types and individual labels. In the area of copper cabling, we supply you with customized trunk cables. If you utilize these with your top-of-the-rack to mid-of-rack cabling, then you can cable directly on site without having to dwell on assembly work (Keystone module).







## MOTIVATED. SOLUTION-ORIENTED. THERE FOR YOU.

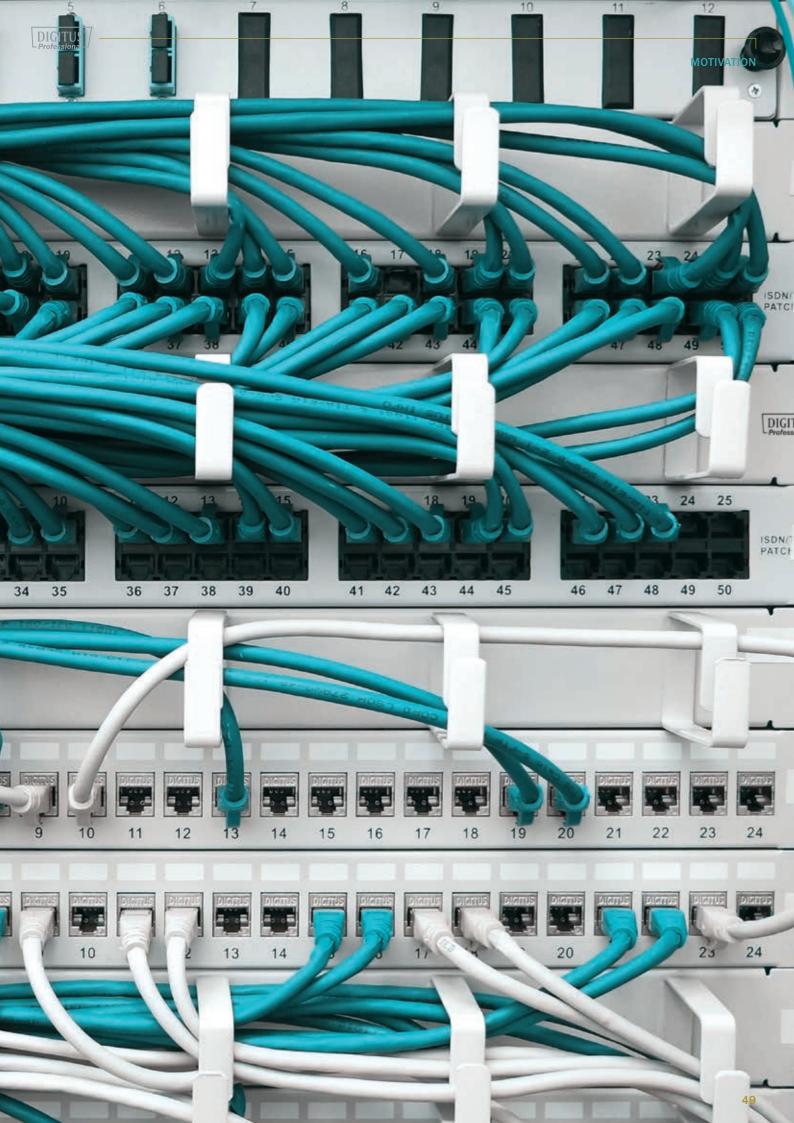
## Worldwide experience in structured computer center cabling

We establish a connection: Between us and our customers, between components and devices. On our way, we have already cabled computer centers with the highest level of security on almost all continents.

We support our customers with new cabling and help them in this way to exchange their existing structures with an innovative cabling solution.

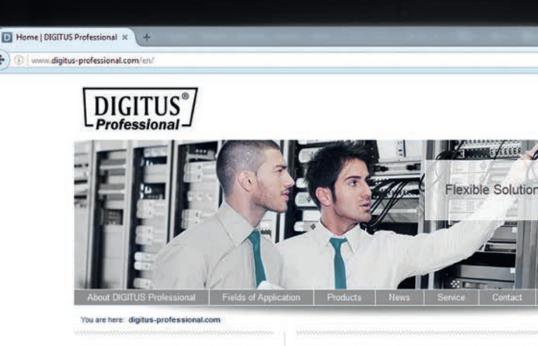
Just in recent years, the demand for computer centers has grown enormously. The quicker things are upgraded, the less time there is for future-proof planning of the cabling. Uncontrolled growth and cable tangle are the result. Chaotically cabled cabinets do not work efficiently, overheat quickly and lead to unnecessary expenses. Together we will design your migration as effectively, fail-safe and investment secure as possible. Our solutions have a future and take into account the newest specifications and standards at all times.

Discretion is of paramount importance when designing computer centers. However, we will happily list for you the sectors in which we have already successfully placed our high-performance cabling solutions. These include: Universities, logistics centers, telecommunication companies, hotels, retail trade, banks, insurers, hospitals, airports, local authorities, ports, server farms as well as public authorities and organizations with security responsibilities.



## YOUR INFORMATION PORTAL FOR ACTIVE AND PASSIVE NETWORK TECHNOLOGY – WWW.DIGITUS-PROFESSIONAL.COM

÷



## News, Trade Shows and Events

The Quick Finder – Getting fast the right product

For more than 20 years DIGITUS® Professional is well known in the market. The product range of

The perfect solution for your network infrastructure: The Network Cabinet Series of DIGITUS® Professional Unique

The Network Cabinet Series of DIGITUS® Professional Unique is designed and produced for cabling and...

Network and Server Cabinet Configuration

### DIGITUS<sup>®</sup> Professional. IT Network Infrastr

With DIGITUS® Professional, we are offering you a range of te building service components and products that are being u example, in the data centers of car makers, airports, universitie industrial enterprises. Discriminating users, specialized compar electricians and data center specialists all rely on DIGITUS® Pr for sourcing the products required to design their projects in an fashion.

We have been engaged as a manufacturer and distributor of pro network infrastructures around the world for over 45 years. I for quality and competence as much as for efficient products wi latest certifications and compatibility in the world of technical I equipment.

Besides our subsidiaries in Europe and Asia, we also work with internationally engaged system integrators, distributors and res

CONTACT

## WITH INTEGRATED **PRODUCT SEARCH**

**IN 5 LANGUAGE VERSIONS:** DE, EN, FR, ES, IT

**PRODUCT FINDER FOR FAST** AND ACCURATE RESULTS

## NEWS, MEASUREMENT DATES AND CONTACT OPTIONS

DATA SHEETS, **CATALOGS & BROCHURES** 

★ 自  $\equiv$ .....



uctures from One Source.

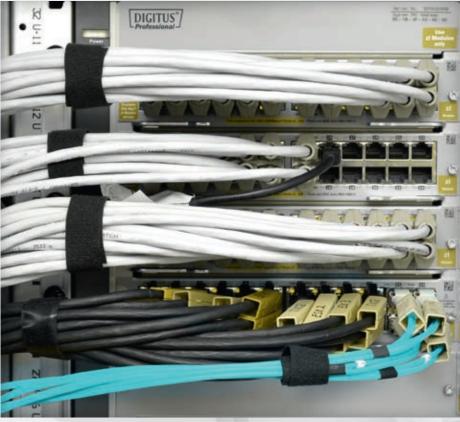




51







www.digitus-professional.com info@digitus-professional.com

Distributed by

All brand names and logos that are mentioned are trademarks or registered trademarks of the respective owners. The right to make design-related variations from the photos, mistakes and technical changes is reserved. All information is provided without guarantee. We assume no liability for printing errors. The right to delivery is reserved and subject to availability. 03/2017