

# MegaLine® Connect100

## The migration-capable connection technology

Upgrade your performance to Cat. 6<sub>A</sub>, 7, 7<sub>A</sub> and higher...



**The Quality Connection**

**LEONI**

## Product range

	page
<b>MegaLine® Connect100 connection technology</b>	
<b>System components at a glance</b>	6
<b>Quality and environmental management</b>	7
<b>CU data cable Cat. „8“</b>	8
<b>CU data cable Cat. 7<sub>A</sub></b>	10
<b>Cable plug</b>	• cable plug Cat. 7 <sub>A</sub> 12
<b>Trunk cable</b>	• Trunk cable Cat. 7 <sub>A</sub> • CP cable Cat. 7 <sub>A</sub> 13
<b>Trunk cable 4-fold</b>	Category 7 <sub>A</sub> , pre-assembled 14
<b>Test report</b>	For every trunk cable 14
<b>Jack modules</b>	• jack module 4K7A                  Cat. 7 <sub>A</sub> • jack module RJ45                  Cat. 6 <sub>A</sub> 15
<b>Wall outlets 50 x 50</b>	for MegaLine® Connect100 jack modules 16
<b>Patch field 19"</b>	• telephony • unequipped 17
<b>Consolidation point housing</b>	• consolidation point housing • module panel • protective flap/strip brush 18
<b>DIN rail housing</b>	Dual, with DIN rail clip 19
<b>Mounting plates for underfloor systems</b>	for installing adapter panels 20
<b>Adapter panels and dummy cover for underfloor systems</b>	for installation in VarioLine® UF mounting plates 21
Patch cord TERA™	• 10BASE-T / 100BASE-T2 • Token ring • ISDN • Telephone line (RJ45) • Telephone line (RJ11) • User-defined • 2-pair connecting line • 4-pair connecting line 22
Patch cord RJ45/RJ45	Cat. 6 <sub>A</sub> /500 MHz 24
LED patch cord RJ45/RJ45	Cat. 6/500 MHz with LED light signal in the plug 25
<b>MegaLine® Patch accessories</b>	• for LED patch cords • for patch cords 26
<b>MegaLine® Accessories &amp; cable assembly tools</b>	• Dust protective flap • Assembly aid • Measurement adapter • Edge free cutter • Combination pliers • Stripper 29



**The MegaLine® Connect100 connection system already satisfies all the requirements of IT networks of the future.**

**Numerous advantages, including affordability and sustainability for the future, place this innovative concept at the leading edge of cable systems.**

With MegaLine® Connect100, upgrades and migrations can be performed with minimal time expenditure and without cost-intensive new installation. Thanks to the modular design, a conversion from Category 6<sub>A</sub> to Category 7<sub>A</sub> with the existing cable structure is no problem whatsoever.



## Investment protection

- Through interchangeable jack modules
- Through upward and downward compatibility
- Through value retention with cable connectors

## Sustainability for the future

- Through interchangeable jack modules
- Ready for 40 Gbit/s

**Issue: October 2012 © LEONI Kerpen GmbH**  
The contents of this catalogue are protected by copyright.  
All rights reserved.

We reserve the right to make technical modifications;  
typographical errors and mistakes excepted.

# MegaLine® Connect100

## Unique advantages.

The cable system for the shortest assembly times, maximum electrical performance and sustainability for the future in data centers and offices.

- Through independent certification (GHMT PVP program)
- Through system guarantee
- Through a complete system from one provider

### Security



- For all classes (D to F<sub>4</sub>) and categories (5 bis 7<sub>a</sub>), including multimedia and ready for 40 GBit/s
- High EMC, Alien Crosstalk by design
- Through PoE and PoE plus

### Performance



- Through high strain-relief
- Through industrial housings

### Durability



- Through a single cable connection with multiple uses
- Through modular design
- Through pre-assembled links

### Ease of assembly



### Cost-effectiveness

- Through the single cable connection with multiple uses
- Through interchangeable jack modules with different performances
- Through modular and removable distribution boards
- Through low maintenance and service costs
- Through short upgrade times
- Through short assembly times
- Through pre-assembled links (shorter downtime)



### Flexibility

- Through interchangeable jack modules
- Through modular design
- Through pre-assembled links



### Environmental friendliness

- Through RoHS conformity
- Through REACH conformity

# MegaLine® Connect100

## Unique functionality.



MegaLine® data cable Cat. 7<sub>A</sub>

pre-assembled  
cable plug Cat. 7<sub>A</sub>

**A Category 7<sub>A</sub> data cable with pre-assembled cable connector – completed with a simple fitting of the desired jack module.**

**Cat. 6A RJ45 jack modules (IEC 60603-7-51) and Category 7<sub>A</sub> jack modules (EN 61076-3-104) are available to choose from**

### **Minimal assembly times – maximum performance**

The ease of assembly is especially beneficial for use in data centers, whereby nearly 100% availability can be guaranteed. Pre-assembled trunks minimise the required assembly times. The interchangeable jack modules enable an upgrade with respect to electrical performance and the connector face in record time.

### **40 GBit/s over copper – ready for the future with MegaLine® Connect100**

Even when the international standardisation has not been finalised, 40 GBit/s applications with components of Category 7<sub>A</sub>, meaning a Class F<sub>A</sub> link can already be realised. The normative selection of the connector face for 40 GBit/s applications has not taken place yet, either. A modular system like MegaLine® Connect100 enables the preparation of both the currently

required performance and the upgrade to the standardised connector faces of the future.

### **Modular systems – cost-effective and environmentally friendly**

In addition to time and cost savings, a modern cable system also fulfils environmental requirements. Even with an upgrade, the MegaLine® Connect100 installation cable can still be used with assembled cable connectors. The use of multi-purpose cables also reduces the energy and cost required for the cooling of the data center.

### **Cable sharing – highest packing density and flexibility**

High packing densities and maximum utilisation of the installed data cable are often a central focus – with the help of the 4K7A module, up to 96 telephones can be connected on one rack

# Unique performance.



Upward compatibility when it comes to performance...

*prepared for 40 GBit/s*

...AND what the future holds.



MegaLine® Connect100 is the innovative connection concept for structured and universal IT cabling systems. The modular component design means that jack modules can also be exchanged at any time with minimal effort.

unit of height (24-port panel) or two PCs per port with a transmission rate of max. 100 MBit/s.



**Outstanding quality – independently monitored by the GHMT Premium Verification Program**

In the accredited GHMT test laboratory, product samples are continuously tested for adherence to European and international standards. For this random testing, GHMT chooses between production, stock or "blind ordering" from resellers.

The adherence to these high quality requirements is continuously verified by GHMT with a Premium Certificate and the Premium Test Report in accordance with EN 17025. In addition, the current status of the certification is publicised on the GHMT home page: [www.ghmt.de](http://www.ghmt.de).



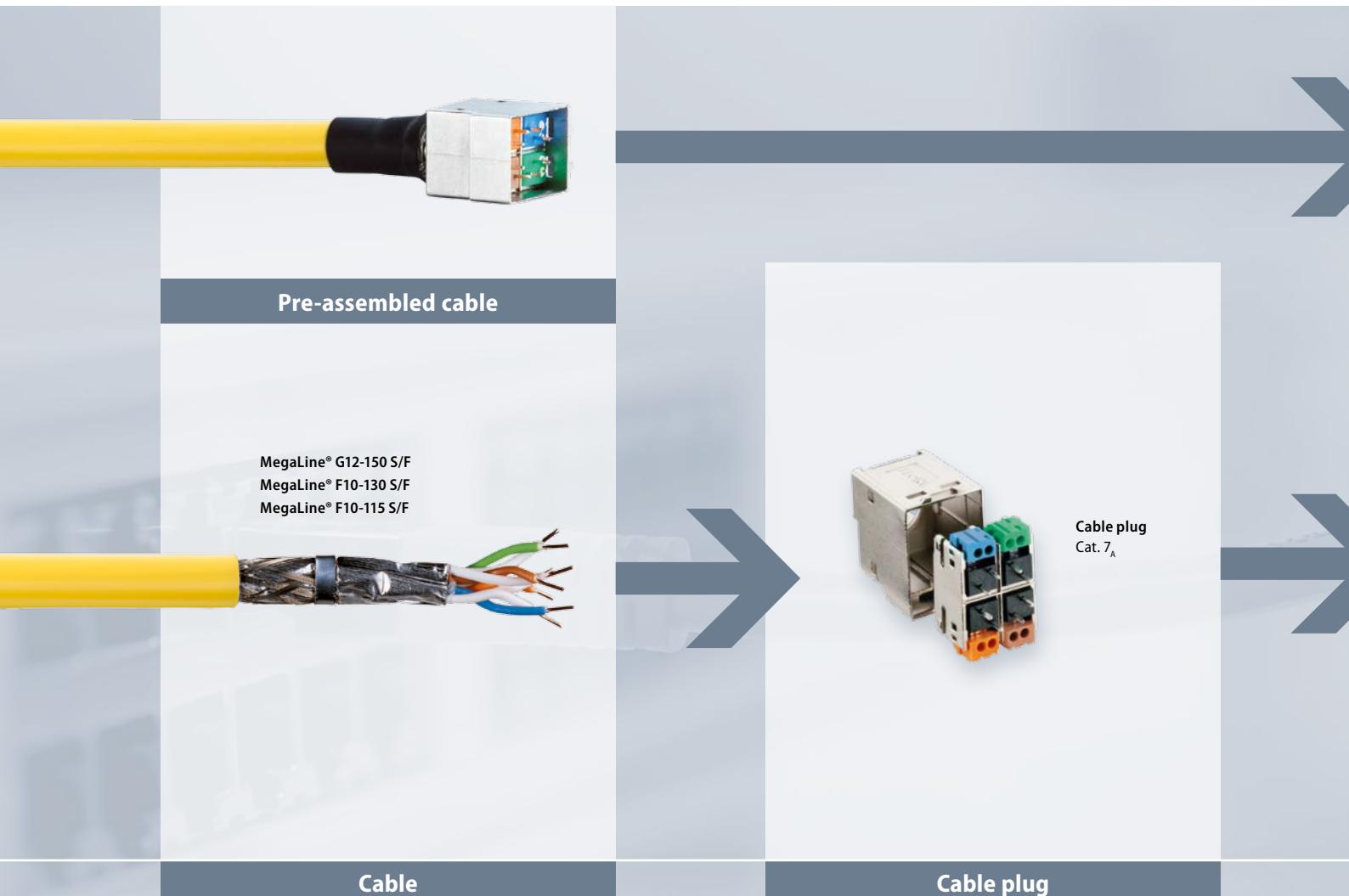
## MegaLine® Connect100 copper technology

System components at a glance.

MegaLine® Connect100 is the innovative connection concept for building wiring systems. The modular design of the components enables both current and future requirements to be met.

The modular design of the available jack modules RJ45 Cat.6<sub>A</sub> (IEC 60603-7-51) and 4K7A (IEC 61076-3-104) allows them to be replaced with relatively little effort. This makes it easy to decide on the right plug face.

MegaLine® Connect100 maintains the value of your investments – in the long term.



# Quality and environmental management

LEONI – The Quality Connection



## LEONI quality management

One of the most important factors in the success of LEONI was and remains the uniformly high quality of its products over the decades. We pay particularly close attention to this through precise planning, testing and documentation. Quality management for the wire and cable types produced by LEONI is certified worldwide in accordance with ISO 9001:2000.

## LEONI environmental management

New environmental directives have been in force in the European Union (EU) since 2006. EU directive 2002/96/EG WEEE (Waste Electrical and Electronic Equipment) regulates the disposal of electrical and electronic equipment and components.

EU directive 2002/95/EG RoHS (Restriction of the Use of certain Hazardous Substances in electrical and electronic Equipment) restricts the use of certain hazardous substances in electrical and electronic equipment and components.



4K7A jack module  
Cat. 7<sub>A</sub>  
white

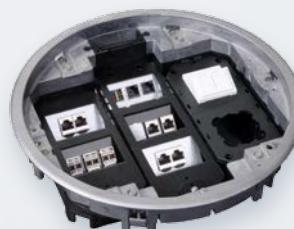


RJ45 jack module  
Cat. 6<sub>A</sub>  
aqua



MegaLine®  
Connect100  
wall outlets

### Wall outlets



VarioLine® UF  
underfloor systems

### Underfloor systems



VarioLine® CP  
consolidation point  
housing



MegaLine®  
Connect100  
Patch field  
19" / 1 RU

## Jack modules

## Housings



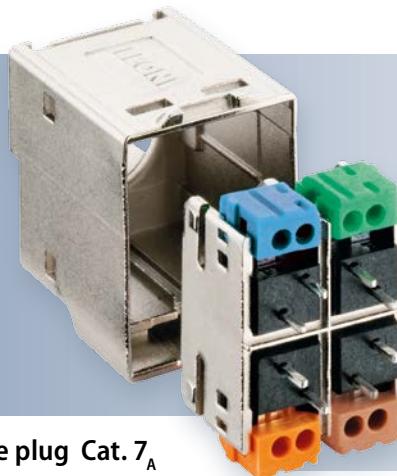






## MegaLine® Connect100 Cable plug

Category 7<sub>A</sub>



MegaLine® Connect100 Cable plug Cat. 7<sub>A</sub>

### Description

Interface to the individually interchangeable MegaLine® Connect100 jack module. The cable plug enables generic transmission links far exceeding the requirements for Class F<sub>A</sub> to be achieved. The mating face can also be identified later without any additional installation effort.

- various mating faces available
- easy and quick assembly

### Structure

Material	PC; die-cast zinc, nickel-plated
Wiring	4 pairs via punchdown method
Strain relief	Via cable ties
Shielding	Large-surface 360° shield connection
Electrical values	Class F <sub>A</sub> / category 7 <sub>A</sub>

### Electrical characteristics

Contact resistance	$\leq 20 \Omega$	
Isolation resistance	$\geq 500 \text{ M}\Omega$	between contacts
Proof voltage	$\geq 1000 \text{ V DC/AC}$	contact-contact
	$\geq 1500 \text{ V DC/AC}$	contact-shielding
Max. current (50° C)	1.25 A	

### Standards

- ISO/IEC 11801
- EN 50173-1
- IEEE 802.3at (PoE+)

Article	Cat.	Order no.
MegaLine® Connect100 Cable plug	Cat. 7 <sub>A</sub>	LKD 9A90 2330 0000









## MegaLine® Connect100 Patch field 19"

telephony / unequipped



**MegaLine® Connect100 Patch field 19"  
telephony**

### Description

Patch field for transmitting analogue and digital telephone signals. With integrated cable management for easy and safe installation.

### Structure

Housing	sheet steel
Colour	light grey, RAL 7035
Marking	1–25
Holder	25 x 8 IDC contacts for max. 100 DA (AWG24 – AWG23)
Strain relief	via cable clips
Cable entry	over the entire width of the cable management rail
Structure	25 ports (TERA 4P)

### Dimensions

19" / 1 RU  
100 mm mounting depth



**MegaLine® Connect100 Patch field 19"  
24 port**

### Description

The patch panel can be equipped with up to 24 MegaLine® Connect100 jack modules.

### Structure

Housing	sheet steel
Colour	light grey, RAL 7035
Marking	jet black RAL 9005
Holder	1–24
Strain relief	up to 24 jack modules: 4K7A / RJ45
Cable entry	via cable clips
Structure	over the entire width of the cable management rail
Structure	24 ports

### Dimensions

19" / 1 RU  
100 mm mounting depth

Article	Order no.
MegaLine® Connect100 Patch field telephony (1 piece)	LKD 9A62 0002 0000

Article	Colour	Order no.
MegaLine® Connect100 Patch field 19" / 24 port (1 piece)	light grey RAL 7035	LKD 9A90 2201 0000
	jet black RAL 9005	LKD 9A90 2202 0000

## VarioLine® Consolidation point housing

2-port up to 24-port, with DIN rail clip



### Description

For installation in raised floors or suspended ceilings. CP housing with strain relief using cable ties (not included in the scope of delivery). Can be equipped with MegaLine® Connect100 jack modules.

A protective flap with strip brush can optionally be used on the patch side.

- modular (interchangeable module panel)
- robust housing made from galvanised steel panel
- RoHS-compliant

### Mounting

- The CP housing is attached using the DIN rail mounting technique (a suitable clip is included)
- The housing can alternatively be attached using screws or nailed dowels (not included in the scope of delivery)
- The module panel is attached by snapping it into the housing
- The modules are attached by snapping them into the module panel



Article	Dimensions approx.	Order no.:
VarioLine® CP2-B consolidation point housing	34.5 x 49 x 100 mm (HxWxD)	LKD 9ZE6 1071 0000
VarioLine® CPL2-B 2-port module panel	32 x 49 mm (HxW)	LKD 9ZE6 1016 0000
VarioLine® CP2-B 2-port protective flap/strip brush	34.5 x 49 x 51 mm (HxWxD)	LKD 9ZE6 1072 0000
VarioLine® CP4-B consolidation point housing	34.5 x 84 x 100 mm (HxWxD)	LKD 9ZE6 1009 0000
VarioLine® CPL4-B 4-port module panel	32 x 84 mm (HxW)	LKD 9ZE6 1015 0000
VarioLine® CP4-B 4-port protective flap/strip brush	34.5 x 84 x 51 mm (HxWxD)	LKD 9ZE6 1070 0000
VarioLine® CP6-B consolidation point housing	34.5 x 121 x 100 mm (HxWxD)	LKD 9ZE6 1007 0000
VarioLine® CPL6-B 6-port module panel	32 x 121 mm (HxW)	LKD 9ZE6 1014 0000
VarioLine® CP6-B 6-port protective flap/strip brush	34.5 x 121 x 51 mm (HxWxD)	LKD 9ZE6 1008 0000
VarioLine® CP12-B consolidation point housing	34.5 x 233 x 100 mm (HxWxD)	LKD 9ZE6 1074 0000
VarioLine® CPL12-B 12-port module panel	32 x 233 mm (HxW)	LKD 9ZE6 1017 0000
VarioLine® CP12-B 12-port protective flap/strip brush	34.5 x 233 x 51 mm (HxWxD)	LKD 9ZE6 1073 0000
VarioLine® CP24-B consolidation point housing	34.5 x 455 x 100 mm (HxWxD)	LKD 9ZE6 1075 0000
VarioLine® CPL24-B 24-port module panel	32 x 455 mm (HxW)	LKD 9ZE6 1018 0000
VarioLine® CP24-B 24-port protective flap/strip brush	34.5 x 455 x 51 mm (HxWxD)	LKD 9ZE6 1076 0000

## MegaLine® Connect100 DIN rail housing

Dual, with DIN rail clip



**MegaLine® Connect100 DIN rail housing,  
dual**

### Description

With DIN rail clip for holding up to 2 MegaLine® Connect100-jack modules.

The housing is mounted by snapping it onto the existing DIN rails. The metal housing is particularly suitable for use in industrial environments.

### Structure

Material	Steel panel, powder-coated
Colour	Light grey, RAL 7035
Capacity	For up to 2 MegaLine® Connect100-jack modules

### Dimensions

85 mm x 35 mm x 95 mm (H x W x D)

Article	Order no.
MegaLine® Connect100 DIN rail housing, dual (1 piece)	LKD 9A46 0097 0000



## VarioLine® Adapter panels and dummy cover for underfloor systems

for installation in VarioLine® UF mounting plates

Adapter panel  
VarioLine® UF AP3  
MC100



VarioLine® UF AP3 MC100

Dummy cover  
UF mounting plates



VarioLine® UF BP-T

### Description

Adapter panel for installation in VarioLine® UF mounting plates.

For installing up to 3 modules.

- with self-adhesive labels for personal labelling
- 2 nut-and-washer assemblies included

### Compatibility

For up to 3 MegaLine® Connect100 jack modules

### Structure

Adapter	Sheet steel, powder-coated, 1.5 mm
Colour	Jet black, RAL 9005

### Description

Blind cover for closing off an unused opening in the VarioLine® UF mounting plate.

- 2 nut-and-washer assemblies included

### Compatibility

For VarioLine® UF carriers

### Structure

Blind cover	Sheet steel, powder-coated, 1.5 mm
Colour	Jet black, RAL 9005

Article	Order no.:
VarioLine® UF AP3 MC100 (1 piece)	LKD 9A46 0118 0000

Article	Order no.:
VarioLine® UF BP-T (1 piece)	LKD 9Z6 0005 0000

## MegaLine® Patch cord TERA™

Shielded, with moulded boots



**MegaLine® Patch TERA**

### Description

The patch cord and connection cable are equipped with TERA™ or RJ45 plugs as required (the RJ45 plug has a moulded boot).

The appropriate cable type for the application is used for assembly. The cable type F10-120 S/F flex used is designed for a bandwidth of up to 1,000 Mhz with 4-pair assignment.

### Applications

- 10BASE-T/100BASE-T2
- Token ring
- ISDN
- Telephone line
- User-defined
- 2-pair connecting line
- 4-pair connecting line

### Wiring

- TERA™ 2-pair to RJ45
- TERA™ 2-pair to RJ45
- TERA™ 2-pair to RJ45
- TERA™ 1-pair to RJ45
- TERA™ 1-pair to RJ11
- TERA™ 4-pair to RJ45
- TERA™ to TERA™
- TERA™ to TERA™

Applications	10BASE-T/100BASE-T2	Token ring	ISDN	Telephone line
Patch cord				
Wiring	TERA™ 2-pair to RJ45	TERA™ 2-pair to RJ45	TERA™ 2-pair to RJ45	TERA™ 1-pair to RJ45

Length	Article	Order no.			Article	Order no.
m		10BASE-T/100BASE-T2	Token ring	ISDN		Telephone line
1.0	MegaLine® Patch TERA™ 2-pair to RJ45 (F10-120 S/F flex)	LKD 9A04 0000 0000	LKD 9A04 0006 0000	LKD 9A04 0012 0000	MegaLine® Patch TERA™ 1-pair to RJ45 (326 flex)	LKD 9A04 0022 0000
2.0		LKD 9A04 0001 0000	LKD 9A04 0007 0000	LKD 9A04 0013 0000		LKD 9A04 0023 0000
3.0		LKD 9A04 0002 0000	LKD 9A04 0008 0000	LKD 9A04 0014 0000		LKD 9A04 0024 0000
5.0		LKD 9A04 0003 0000	LKD 9A04 0009 0000	LKD 9A04 0015 0000		LKD 9A04 0025 0000

TERA™ is a registered trademark of the Siemon Company



Applications	Telephone line	Any	2-pair connecting line	4-pair connecting line
Patch cord				
Wiring	TERA™ 1-pair to RJ11	TERA™ 4-pair to RJ45	TERA™ to TERA™	TERA™ to TERA™

Length	Article	Order no.	Article		Article	Order no.	
m		Telephone line		User-defined		2-pair connecting line	4-pair connecting line
1.0	MegaLine® Patch TERA™ 1-pair to RJ11 (326 flex)	LKD 9A04 0017 0000	MegaLine® Patch TERA™ 4-pair to RJ45 (F10-120 S/F flex)	LKD 9A04 0039 0000	MegaLine® Patch TERA™ to TERA™ (F10-120 S/F flex)	LKD 9A04 0026 0000	LKD 9A04 0032 0000
2.0		LKD 9A04 0018 0000		LKD 9A04 0040 0000		LKD 9A04 0027 0000	LKD 9A04 0033 0000
3.0		LKD 9A04 0019 0000		LKD 9A04 0041 0000		LKD 9A04 0028 0000	LKD 9A04 0034 0000
5.0		LKD 9A04 0045 0000		LKD 9A04 0042 0000		LKD 9A04 0029 0000	LKD 9A04 0035 0000

TERA™ is a registered trademark of the Siemon Company





## MegaLine® Patch accessories

for LED patch cords



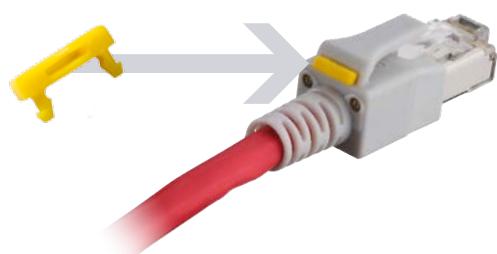
MegaLine® Patch LED colour clip  
MegaLine® Patch LED detector

### Accessories

#### Colour clip:

For visual coding of the LED patch cords.

Can be installed by simply snapping into the RJ45 plugs.



#### Detector:

For feeding the light signal for identifying the patch cord.

#### Batteries included:

4 x LR41

## MegaLine® Patch accessories

for RJ45 patch cords



MegaLine® Patch RJ45 colour coding clip

### Accessories

Colour coding clip for visual coding of the patch cords.

Can be installed by simply pushing on.

### Compatibility

MegaLine® Patch 5D-RJ45

MegaLine® Patch 6E-RJ45U

MegaLine® Patch 6EA-RJ45

MegaLine® Patch 6AEA-RJ45

MegaLine® Patch Industry 6EA-RJ45

Article	Colour	Order no.
MegaLine® Patch LED colour clip (100 pieces)	Yellow RAL 1021	LKD 9A09 0180 0000
	Flame red RAL 3000	LKD 9A09 0181 0000
	Sky blue RAL 5015	LKD 9A09 0182 0000
	Turquoise green RAL 6016	LKD 9A09 0183 0000
MegaLine® Patch LED detector (1 piece)		LKD 9A09 0190 0000

Article	Colour	Order no.
MegaLine® Patch RJ45 colour coding clip (100 pieces)	Light grey RAL 7035	LKD 9AW1 6031 0000
	Turquoise green RAL 6016	LKD 9AW1 6032 0000
	Sky blue RAL 5015	LKD 9AW1 6033 0000
	Flame red RAL 3000	LKD 9AW1 6034 0000
	Pastel orange RAL 2003	LKD 9AW1 6035 0000
	Rape yellow RAL 1021	LKD 9AW1 6036 0000
	Jet black RAL 9005	LKD 9AW1 6037 0000

## MegaLine® Accessories & cable assembly tools



**MegaLine® Connect100  
Dust protective flap**

### Description

- for colour coding
- the transparent design also enables the identification of the connector face while closed

Article	Colour	Order no.
MegaLine® Connect100 dust protective flap (50 pieces)	Red	LKD 9A90 4002 0000
	Green	LKD 9A90 4003 0000
	Blue	LKD 9A90 4004 0000
	Yellow	LKD 9A90 4005 0000
	White	LKD 9A90 4006 0000



**MegaLine® Connect100  
Assembly aid**

### Description

- For the easy adjustment and cutting to length of the conductors assembling the MegaLine® Connect100 cable plugs

Article	Order no.:
MegaLine® Connect100 Assembly aid (10 pieces)	LKD 9A90 4001 0000



**MegaLine® Connect100  
Measurement adapter**

### Description

- for direct Class F<sub>A</sub> acceptance measurement on the cable connector
- the fitting of a 4K7A jack module is not necessary

Article	Order no.:
MegaLine® Connect100 Measurement adapter (2 pieces)	LKD 9A90 4020 0000



**MegaLine®  
Edge free cutter**

### Description

- for easy and safe shortening of wire pairs

Article	Order no.:
MegaLine® Edge free cutter (1 piece)	LKD 9ZE3 0012 0000



**MegaLine® Connect100  
Combination pliers**

### Description

- For the easy assembling of the MegaLine® Connect100 jack modules with the MegaLine® Connect100 cable plug and the wire manager

Article	Order no.:
MegaLine® Connect100 Combination pliers (1 piece)	LKD 9A90 4007 0000



**MegaLine®  
Stripper**

### Description

- fast and easy sheath removal of copper data cable (esp. S/FTP)
- for the removal of the outer sheath as well as the PiMF foil

Article	Order no.:
MegaLine® Stripper (1 piece)	LKD 9AW1 6043 0000

Find out more:

**Business Unit Infrastructure & Datacom**  
[www.megaline-connect100.com](http://www.megaline-connect100.com)

**LEONI Kerpen GmbH**

Zweifaller Strasse 275–287  
52224 Stolberg  
Germany  
Phone +49 (0)2402 17 1  
Fax +49 (0)2402 75154  
E-mail [infrastructure-datacom@leoni.com](mailto:infrastructure-datacom@leoni.com)

**LEONI Studer AG**

Herrenmattstrasse 20  
4658 Daeniken  
Switzerland  
Phone +41 (0)62 288 82 82  
Fax +41 (0)62 288 83 83  
E-mail [infrastructure-datacom@leoni.com](mailto:infrastructure-datacom@leoni.com)