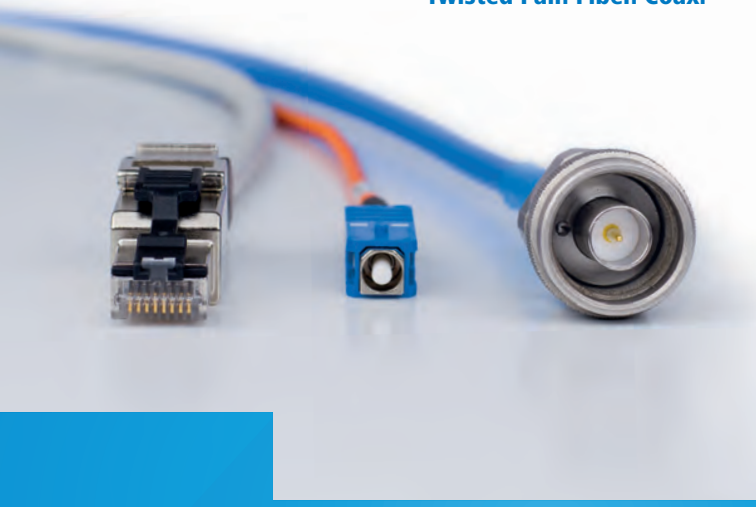
BEST CONTACTS FOR YOUR SUCCESS

Telegärtner
KARL GÄRTNER GMBH

NETWORKING COMPONENTS
COAXIAL CONNECTORS
CABLE ASSEMBLIES
PRECISION TURNED PARTS
PLASTIC INJECTION MOULD PARTS
INDUSTRIAL ELECTRONICS

We connect you
Twisted Pair. Fiber. Coax.



Telegärtner
Product Overview
Coaxial Connectors
Networking Components

Best contact for your success

Telegärtner Karl Gärtner GmbH in Steinenbronn near Stuttgart is an internationally operating provider of complete professional solutions in connection technology. The company enjoys a long tradition in the production and sales of RF coaxial connectors, networking solutions for structured building cabling and modular programmes in the industrial and fiber optic sector.

In its history – spanning over 70 years - Telegärtner Karl Gärtner GmbH has evolved from a spare parts supplier for telephone installations in American barracks to one of the top addresses for coaxial connectors, networking components and cable assemblies. But the reason for this remarkable development can be put down solely to the companys unchan-ging policy regarding its traditions during all these years. Telegärtners aim is not only to produce good quality products, but also to give customers excellent solutions with which they can work successfully.

Telegärtner meets high technical demands and satisfies conventional customer needs with great commitment, regardless of whether a large or small series is required, Telegärtner is the ideal standard supplier and development partner for customers who demand and expect the best contacts for their success.

Detailed information about Telegärtner, as well as our online catalogue, can be found at: **www.telegaertner.com**

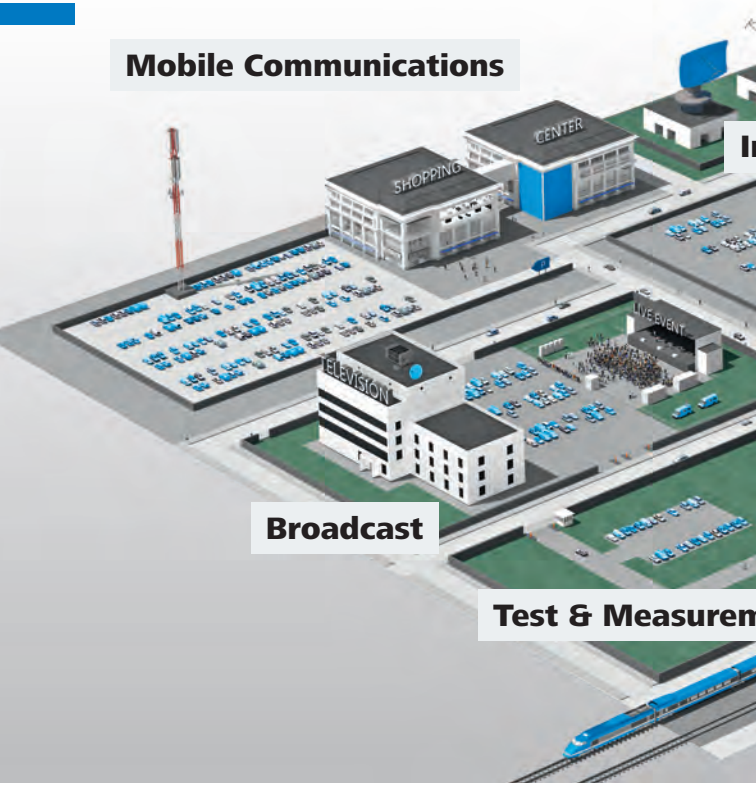
The right solution for all requirements

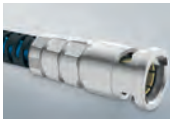
All of the Telegärtner products were developed to ensure reliable transmission of data and signals. With our extensive product range, we can offer you the most suitable solution for a multitude of applications.
However, since every application has its own special requirements, it is sometimes necessary to adapt individual products or modules to meet the specific requirements of the application. With the online configurators, it is possible for you to configure and send in inquiries for cables and connectors to meet your requirements.
Beyond that, we of course develop and manufacture solutions completely to your specific requirements. Just talk to us!

The complete product range with PLUS POINTS

Coaxial RF Connectors for the highest demands

Regardless of whether you need coaxial connectors for high power transmission in the transmitting range, device-internal miniature connectors for electronic equipment or high-precision connectors for laboratory measuring instruments: Telegärtner can always offer you the right solution for your individual requirements. With more than 2,300 products, the Telegärtner Coax assortment is one of the most comprehensive on the market. In addition, with more than 4,800 developments, Telegärtner is one of the leading development partners for RF connectors.





The complete product range with PLUS POINTS for ...

... Performance
- wide range of RF connectors
- special solutions

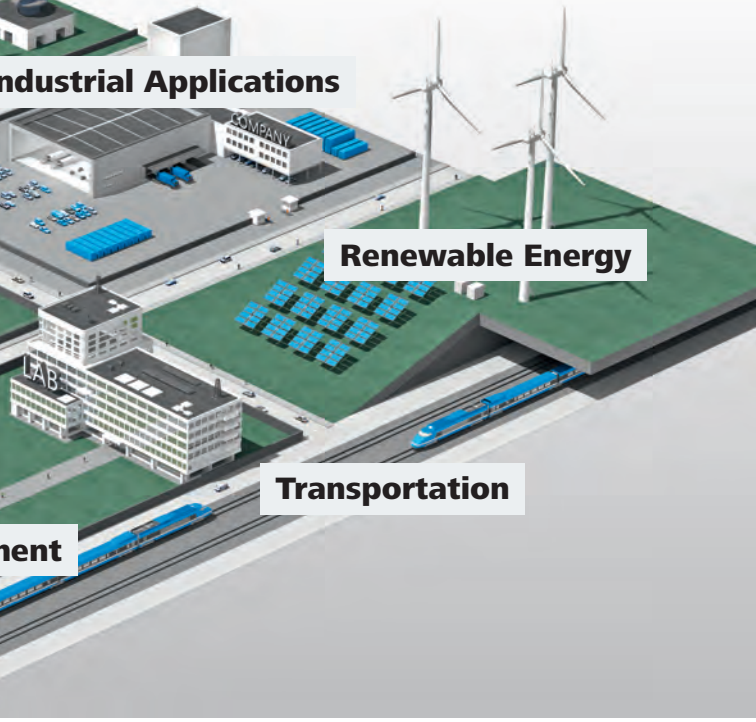
... Variety
- all standard series

... Customer Orientation
- fast response times
- short development times
- qualified consulting
- quick delivery

... Reliability
- lower failure rates
- greater power reserves

& Satellite

ndustrial Applications



Renewable Energy

Transportation

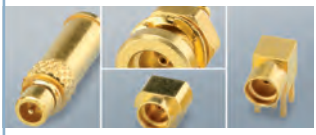
nent

Miniature/Microminiature Connectors

Series SMA

- frequency up to 18 GHz
- PCB connectors in solder and press-fit designs
- for flexible, conformable and semi-rigid cable types
- standard: IEC 60 169-15; ingress resistance: IP68
- applications: communications, satellite, test equipment

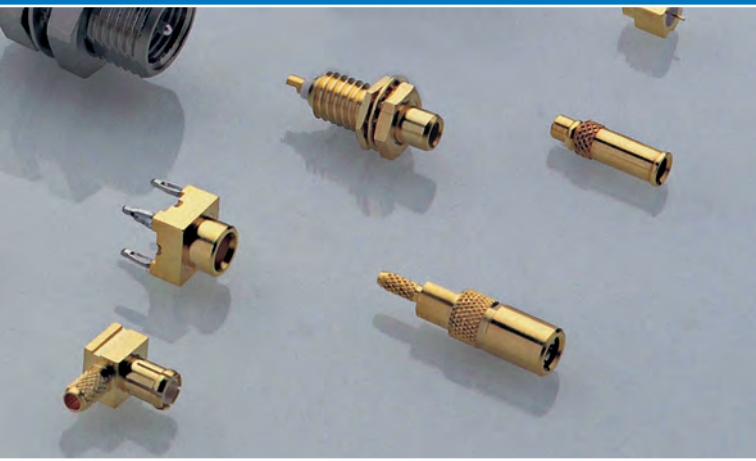
Series MMCX



- frequency up to 6 GHz
- PCB connectors in solder and press-fit designs
- for flexible, conformable and semi-rigid cable types
- standard: EN 122340
- applications: instrumentation, communication equipment

Series MCX

- frequency up to 6 GHz
- PCB connectors in solder and press-fit designs
- for flexible, conformable and semi-rigid cable types
- standard: IEC 61 169-36
- applications: small instruments, communication equipment

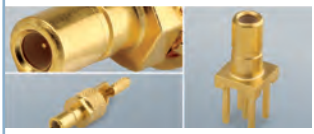


SMA, MMCX, MCX, SMP, SSMB, SMB

Series SMP

- frequency up to 12 GHz
- snap coupling design
- coupling mechanisms: smooth bore, limited detent, full detent
- mating face: MIL-STD-348A
- applications: high speed signal transmission lines

Series SSMB



- frequency up to 3 GHz
- snap coupling design
- for flexible cables (e.g. RG-316 and RG-178)
- standard: IEC 60 169-19
- applications: small instruments, communication equipment

Series SMB

- frequency up to 4 GHz
- snap coupling design
- for flexible, conformable and semi-rigid cable types
- standard: IEC 60 169-9
- applications: electronic equipment

RF Connectors

Series BNC

- frequency up to 4 GHz
- bayonet coupling
- standard: IEC 61 169-8
- applications: signal, data and video transmission
- 50 and 75 Ω impedances

Series TNC

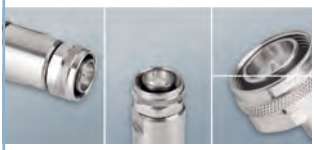
- frequency up to 11 GHz
- threaded coupling mechanism
- standard: IEC 61 169-17
- ingress resistance: IP68

Series R-TNC

- frequency up to 6 GHz
- threaded coupling machanism
- applications: W-LAN
- 50 Ω impedance

BNC, TNC, R-TNC, 4.3-10, N, 7-16

Series 4.3-10



- frequency up to 6 GHz
- screw, push-pull, hand screw variants
- for flexible, conformable, semi-rigid and corrugated cable types
- applications: radio base stations
- Power 700 W (1 GHz); 500 W (2 GHz)

Series N

- frequency up to 11 GHz
- for flexible, conformable and semi-rigid cable types
- standard: IEC 61 169-16
- applications: signal and data transmission

Series 7-16

- frequency up to 7.5 GHz
- threaded coupling mechanism
- for flexible, conformable, semi-rigid and corrugated cable types
- standard: IEC 60 169-4
- applications: mobile radio base stations

HDTV Connectors

The so-called High Definition Television (HDTV) places far higher electrical demands on the 75 Ω BNC, Mini HD-BNC and F connectors commonly used, in order to improve the system Return Loss performance and, therefore, the signal reflection, up to a frequency of 4.5 GHz.
Unlike standard F connectors, all the Telegärtner designs include a center contact.

75 Ω HDTV connectors BNC and F

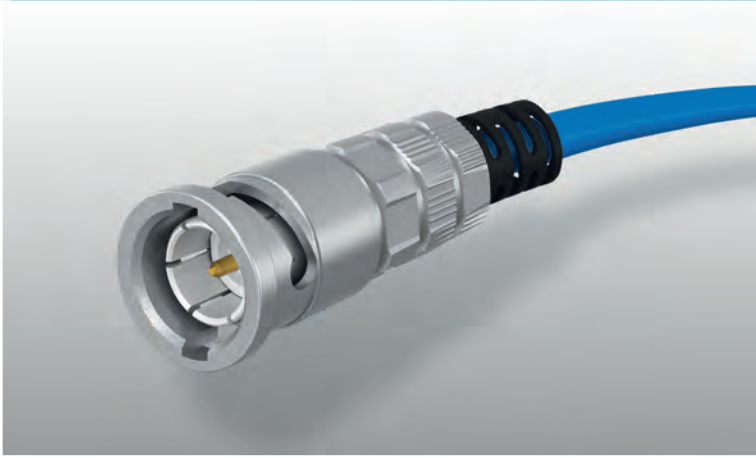
- **high data rates of 25 Mbit/s per channel**
- **excellent return loss values up to 4.5 GHz (measured)**
- **for cable diameters up to 10 mm**

75 Ω F HDTV adaptors BNC and F

- **high quality BNC and F adaptors for HDTV**
- **bulkhead BNC and F adaptors for use in distribution panels**

75 Ω Mini HD-BNC

- **space saving 75 Ω connection for HDTV applications**
- **straight plugs and bulkhead jacks**



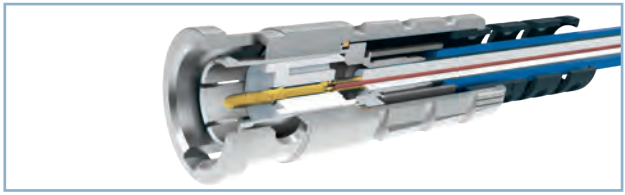
BNC EasyGrip HD³

The BNC EasyGrip HD³ series conforms to the IEC standard (IEC 61 169-8), and as such is fully compatible with all standard BNC 75 Ω connectors. The series has the following distinguishing features:

High Definition: Excellent transmission characteristics up to 4.5 GHz (return loss values of < -30 dB typ. and, therefore, totally suitable for HDTV).

High Density: Special grip features involving an extended and tapered coupling nut to facilitate connecting and disconnecting the connectors to high packing density panels.

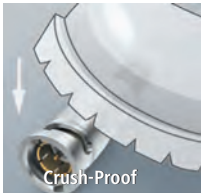
High Durabiltity: The die-cast zinc housing with integrated strain relief ensures reliable protection against mechanical pressure and knocks.



Easy Grip: large area

High packing density

Strain relief


Crush-Proof

Connector Identification

Water- and dust-proof

Mobile Radio Base Stations Components

SIM*Fix*® connectors for corrugated cables

- for cable types 3/8", 1/2", 7/8", 1 1/4", 1 5/8"
- available series: 4.3-10, N and 7-16
- compatible with cables from all well-known manufacturers
- excellent electrical parameters (return loss, IMP3)
- easy assembly with and without special tooling

Jumper cables

- very low intermodulation products (IMP3)
- with 4.3-10, N and 7-16 connectors
- straight and angle designs
- 1/2", 3/8" and 1/4" corrugated cables

RET cables

- AISG 8 pin connector
- for Remote Electrical Tilt
- D-Sub variants available

Surge Suppressors

G27-Series with gas discharge tube

- Series: N, 7-16
- frequency DC up to 2.7 GHz
- max. 300 W; 40 KA (8/20 µs) discharge current
- replaceable gas capsules

G6-Series with gas discharge tube

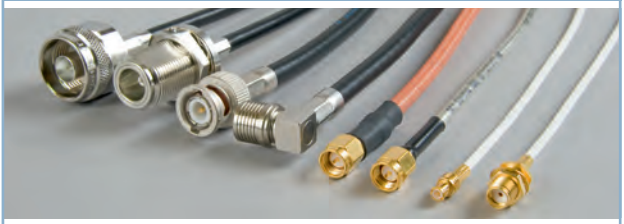
- series: SMA, R-SMA, TNC, R-TNC, N
- frequency up to DC 6 GHz
- max. 25 W; 10 KA (8/20 µs) discharge current
- excellent return loss

λ/4 shorting stubs

- series: N, 7-16
- max. power 500 W (2 GHz)
- 100 KA (8/20 µs) discharge current
- for types with DC Pass: 30 KA (8/20 µs)
- high reliability and long life, no servicing required

RF Cable Assemblies

Cable assemblies



Telegärtner is equipped with modern production facilities and is thus able to manufacture cable assemblies exactly in accordance with customer specifications in the shortest of lead-times. The use of high-precision equiment for preparing cables, as well as special crimp presses, ensures an efficient and reliable assembly production. The well-trained and experienced personnel guarantee high-quality production. Furthermore, the cable assemblies are subject to a 100% voltage and electrical continuity test.

Coaxial cables in bulk

Criteria for selecting:
- **impedance**
- **insertion loss (attenuation)**
- **screen effectiveness**
- **temperature range**

- **RG cables, low loss cables, conformable semi-rigid cables**
- **50 Ω and 75 Ω types**
- **low price cable with PE or PVC jacket or temperature resistant cables (up to ca. 200°C) with FEP/PTFE**
- **standard length coils**
- **special lengths on request**
- **available ex stock**
- **suitable for terminating with Telegärtner coaxial connectors**
- **conform to RoHS 2011/65/EU directive**

www.telegaertner.com/coaxconfig/en

Inter-Series Adaptors

- large selection of high qualitiy inter-series adaptors in most widely used designs
- 50 Ω and 75 Ω adaptor types
- reverse adaptors available in the SMA and TNC series
- large stocks
- all adaptors conform to RoHS EU directive 2011/65/EU (new edition)
- inline designs
- bulkhead designs
- panel designs

Adaptors are available for the following series:

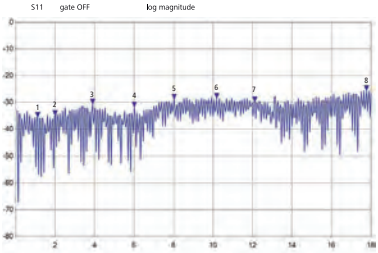
BNC	SMA	R-TNC
TNC	7-16	R-SMA
N	4.3-10	MCX
UHF	FME	1.6/5.6
Mini HD-BNC	SMB	F
N	QLS	UMTC

TestLine RF Test Cables

Product Features

- frequency range up to 18 GHz/26 GHz/40 GHz
- high phase stability during cable flexing
- return loss stability during calbe flexing
- low return loss and insertion loss
- specially developed precision connectors
- high number of mating cycles
- 100% tested, with measurement diagram

Return loss TestLine cable up to 18 GHz

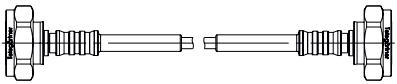


marker	stimulus	value
1	1,118 GHz	-35,590 dB
2	2,000 GHz	-34,745 dB
3	3,901 GHz	-30,583 dB
4	6,012 GHz	-31,684 dB
5	8,032 GHz	-28,764 dB
6	10,187 GHz	-28,479 dB
7	12,118 GHz	-29,762 dB
8	17,776 GHz	-25,580 dB

Types

SMA

N



7-16

TestLine Components

Attenuators

- frequency range up to 6 GHz
- precise attenuation values ± 0.1dB up to 2 GHz, ±0.2 dB up to 5 GHz
- 50 Ω impedance
- additional attenuation values and mating face designs on request

Termination loads

- 7-16, N, TNC, BNC, SMA series available
- power handling capabilities from 1 W up to 625 W
- frequencies up to 18 GHz

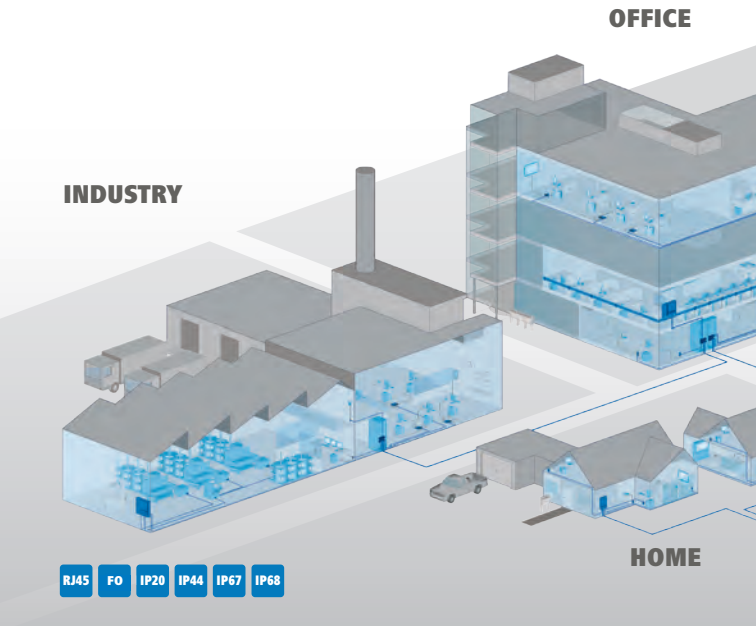
Connector Savers

- reduces wear on expensive connectors / test cables
- large selection of adaptors in all series and inter-series designs
- Push-on and quick-connect designs

The Cabling System with PLUS POINTS

Professional Package System for Generic Building Cabling

DataVoice is a reliable professional package developed by Telegärtner to meet all generic cabling requirements in office buildings, production halls and machines. The office product line ranges from connection and distribution components for optical transmission systems and preassembled optical fiber sections right through to powerful passive components for copper cable transmission. Whether your requirements be for on the factory floor or for the wiring machinery: with our extremely reliable RJ45 wiring systems, DataVoice offers everything you require for modern gigabit-speed networks in the industrial environment of production areas and machinery wiring.
Our product offering is complemented with cable assemblies - for a complete generic building cabling system.



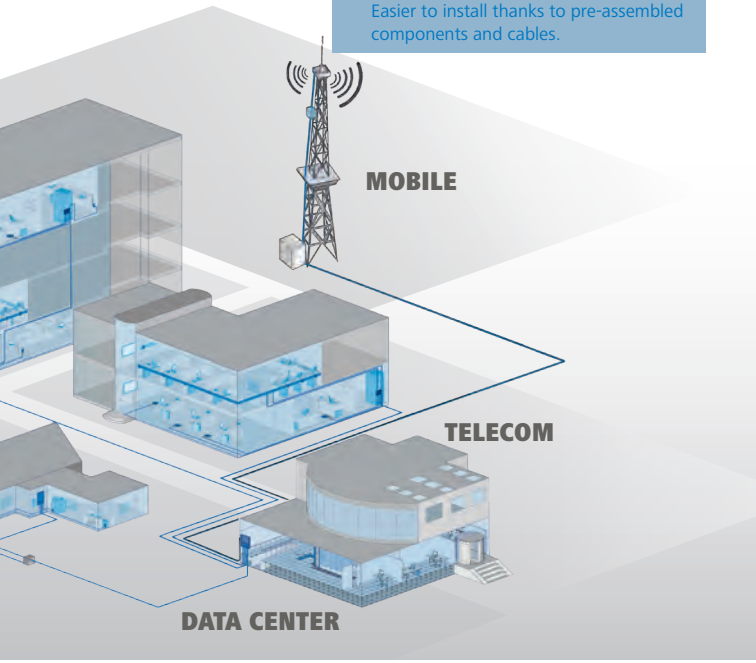
The Cabling System with PLUS POINTS for...

... Power
Guaranteed transmission rates of up to 100 Gbit with fiber optics and 40 Gbit with copper thanks to cutting-edge technology.

... Practicality
Integrated system for office networks, production halls, machine and plant networks.

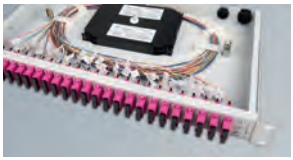
... Availability
IP20 and IP68 protected housings for reliable connections for extreme demands in heavy-duty conditions.

... User-friendliness
Easier to install thanks to pre-assembled components and cables.



RJ45/FO Components...

Singlemode OS2 / Multimode OM1 - OM4



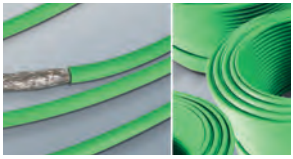
19" FO Patch Panels
1 - 3 HU types

FO Wall Distributor for 2 - 288 fibers
IP20/IP54/IP66

...for Structured Cabling

Cat.8.1, Cat.6$_A$, Cat.6, Cat. 5e

RJ45 19" Patch Panels



Copper Installation Cables

RJ45 Outlets

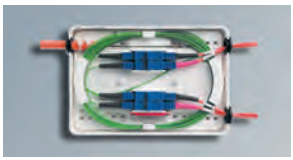
FO Distributor IP68

RJ45 Patch Cords LSZH/PVC/PUR
FO Patch Cords with standard plugs

RJ45/FO Components...

Singlemode OS2 / Multimode OM1 - OM4

FO Wall Distributor ODB 54
IP 54



FO Micro Splice Box

...for Smart Homes

Cat.8.1, Cat.6$_A$, Cat.6, Cat. 5e

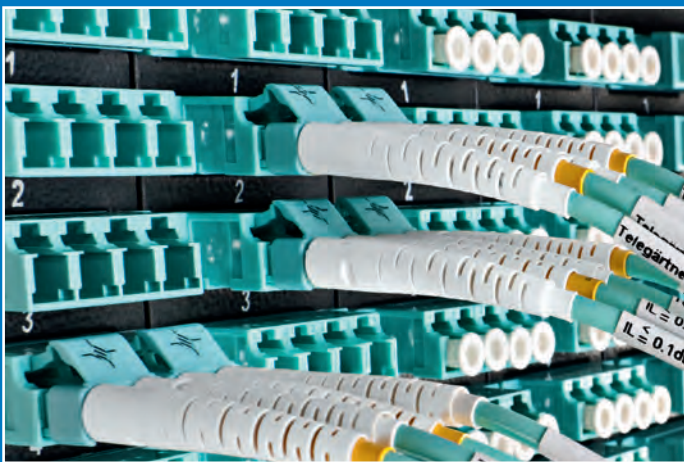
RJ45 Mini Distributors
surface, wall, DIN-rail or 3 HU mounting

RJ45 Mounting Rail Outlets
for control cabinets or
multimedia distributors

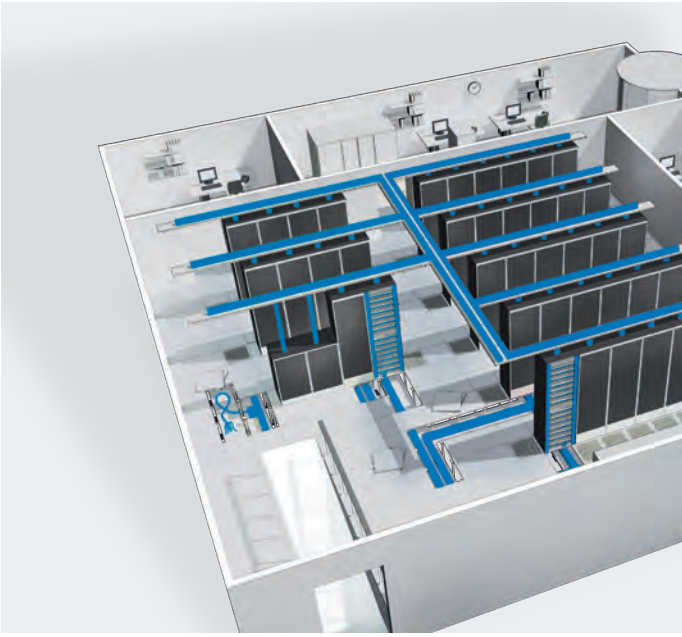
RJ45 Modular System

Pre-assembled outlets
Fiber-In-The-Home

Field Assembly RJ45 Connectors
MFP8, 180°/4x90°



RJ45/FO Components...



Singlemode OS2 / Multimode OM3 - OM4

MPO/MTP® Fanout Module
to LC/SC

Pre-assembled
MPO/MTP® Trunk Cable

...for Data Center Cabling

Cat.8.1, Cat.6$_A$, Cat.6, Cat. 5e

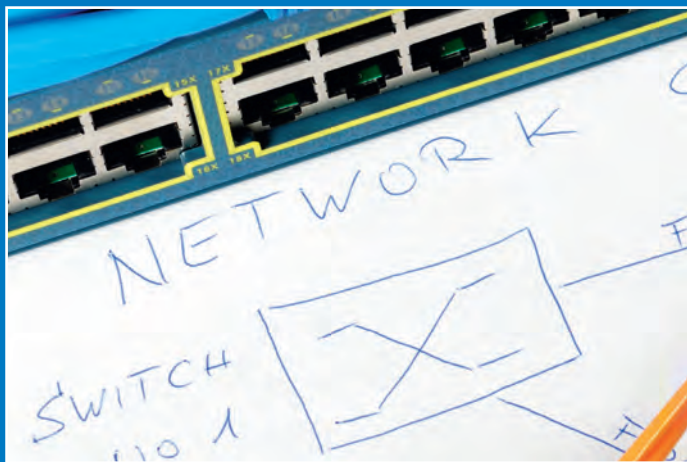
Pre-assembled RJ45 Trunk Cable
with module or plug

RJ45 Modular System

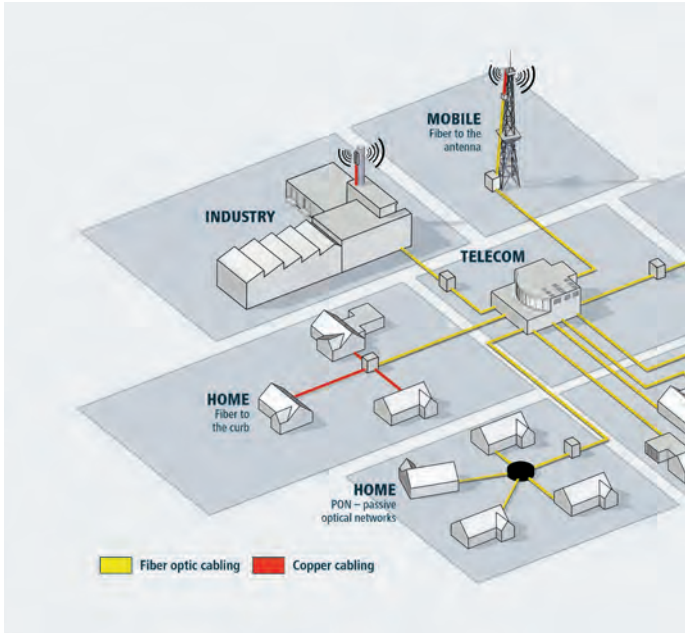
19" 48 Port Feedthrough Panel
1 HU, High Density

MPO/MTP® Harness
to LC/SC

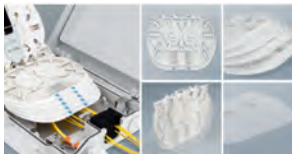
Telegärtner Owl
Patch Management System



FTTH/FTTB Solutions

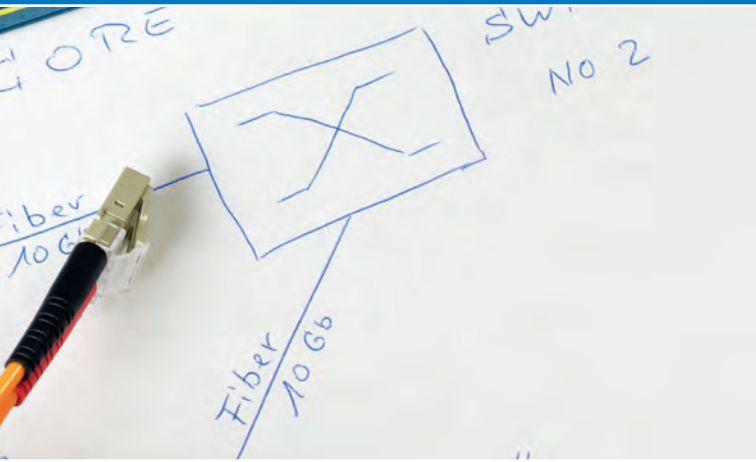


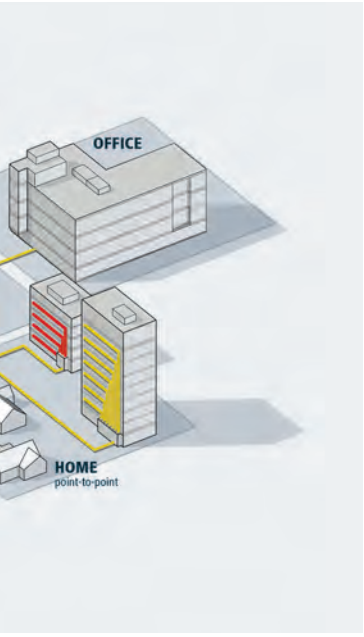
Singlemode OS2 / Multimode OM1 - OM4



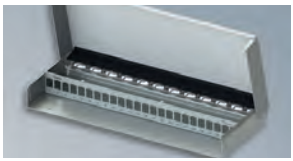
FO Single Fiber Management SAM

FO Distributor IP68





Cat.8.1, Cat.6$_A$, Cat.6, Cat. 5e



RJ45 Distributors with 24 Ports for surface mounting

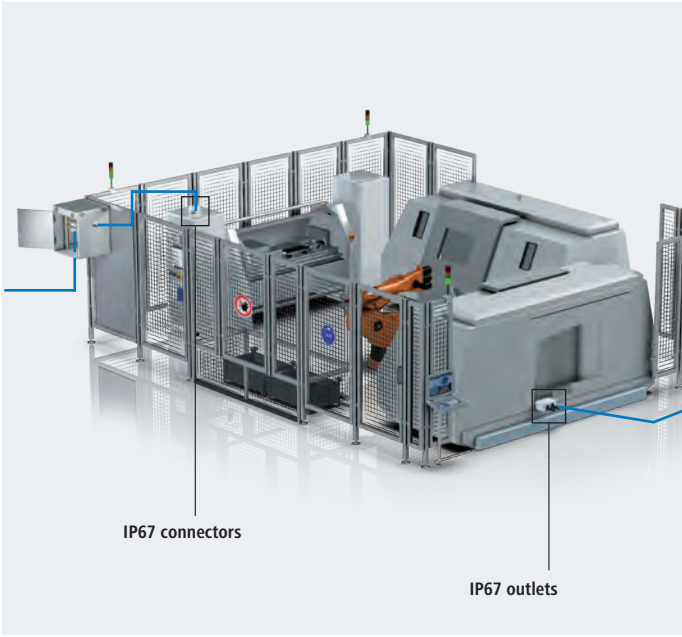
RJ45 Mounting Rail Outlets for control cabinets or multimedia distributors

RJ45 Patch Cords LSZH/PVC/PUR

FO Patch Cords and Pigtails

RJ45/FO/USB Telecommunications Outdoor Connectors TOC IP68

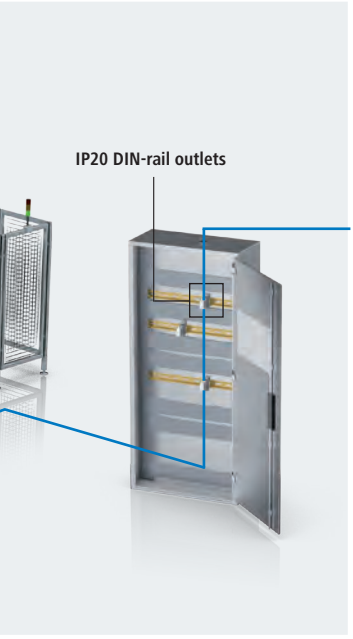
Fiber Optic or Copper Solutions...



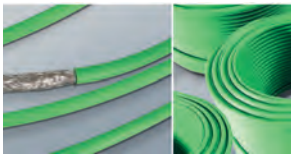
Components for Field Cabling

Outlets IP67

...for Industrial Cabling



Field Assembly RJ45 Connectors
MFP8, 180°/4x90°



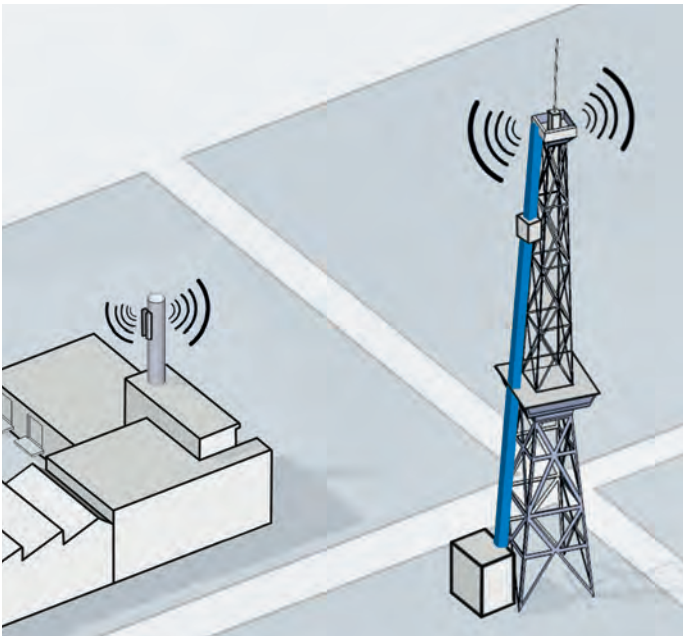
Copper Cables in bulk

RJ45 Patch Cords LSZH/PVC/PUR

Components for the
Control Cabinet

M12 D and X Coded
Circular Connectors

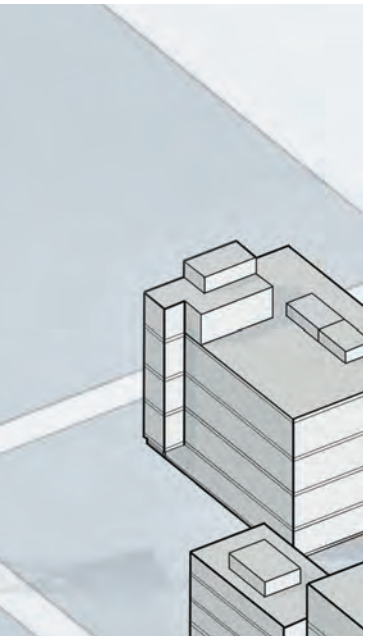
RJ45/FO Components...



FTTA Connectors IP68
TOC, TDC, FXC, RBC, FEM

RJ45 Patch Cords LSZH/PVC/PUR

...for Mobile Radio Base Station Cabling



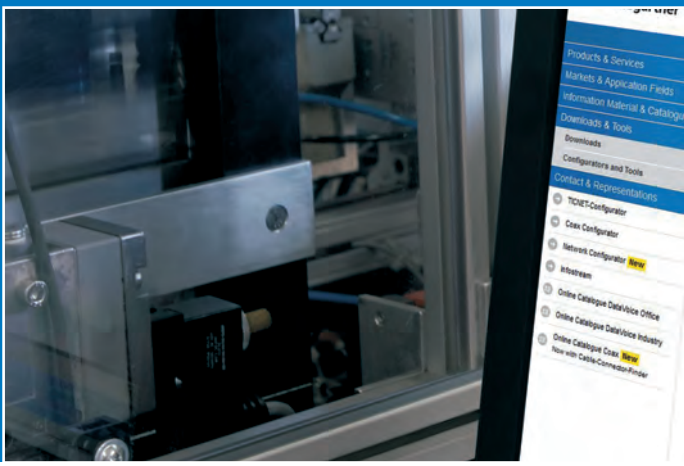
Jumper Cables IP68
Series 7-16 and 4.3-10

RET Cables IP67

Surge Suppressors IP67
Series N and 7-16

FO Patch Cords and Pigtails

RJ45/FO/USB Telecommunications
Outdoor Connectors TOC IP68



Telegärtner Online Configurators

TICNET Configurator

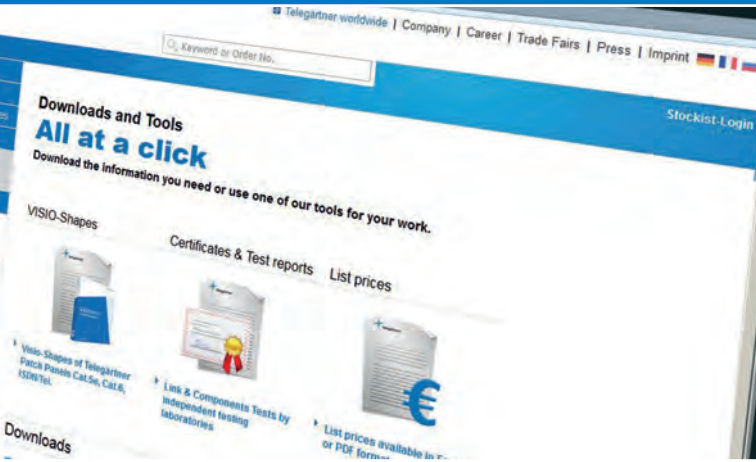
Ideal for planners and installers:
Do you want to assemble cables and connectors online or a fiber optic patch panel to meet your specific needs and then send an order inquiry to your local specialist retailer straight away? Then the TICNET Configurator developed by Telegärtner is just what you need!

Configure your product:
There are 8 different configuration tools available to create various individual product combinations.
Detailed product information with images and technical information is available to assist you with your configuration.

Show final product:
All the information relating to the product you require is listed in a clear breakdown including the gross list prices classified by price bracket. Your data is available in PDF, XLS, DOC format for download after configuration. You can view the products you have configurated at any time.

Configuration to shopping basket:
It is possible to change quantity, copy with different cable length and show parts list of your configuration. Also you can send an order inquiry to Telegärtner.

www.telegaertner.com/go/ticnet/en



Network Configurator

Ideal or planners, installers and building owners:
You want to plan the structured cabling of your network quickly and easily online and to have all the necessary information shown cleary offered for downloading after configuration? Then the network configurator is just what you need!

Clear room and floor views:
Use the floor view for the floor comprehensive representation and the room view for the easy planning of your individual network.

Detailed parts list:
Each product which you require for your individual configuration is listed in a clerarly arranged parts list. Besides the technical data you can also check the gross prices.
You can download your parts list either in PDF or in Excel format.

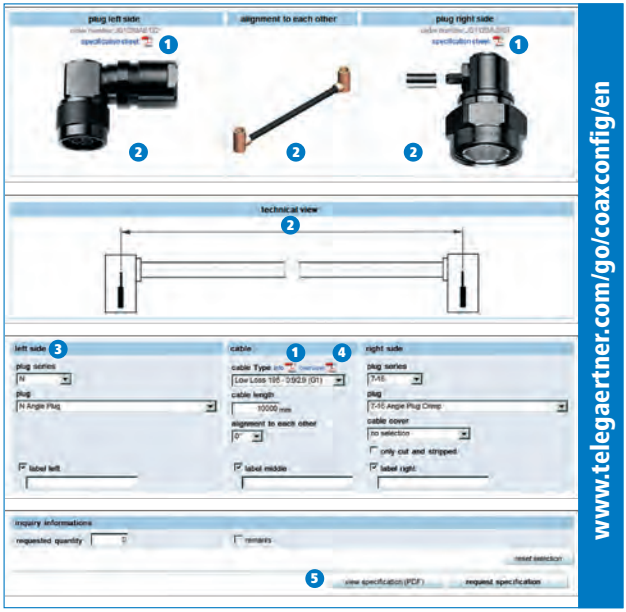
Editable projects :
All projects which you have developed in the network configurator can be saved. With your personal security code you can reload and edit your projects at any time.

www.telegaertner.com/go/network-config

Telegärtner Online Configurators

COAX Configurator

Ideal for design engineers and buyers: with the Coax Configurator from Telegärtner you can assemble RF cables with coaxial connectors individually and add cable protection, labelling and cable length according to your requirements.



1. Detailed display of all products – with PDF data sheets for downloading.
2. Illustration of the connectors by photos and technical drawings.
3. All configuration parameters at a glance.
4. Detailed overview of all available cables.
5. Your individual configuration as a clear specification in PDF format: for downloading and printing.

Telegärtner offers professional solutions for all aspects of structured building cabling and industrial ethernet as well as a wide range of RF connectors. Order your personal catalogue copies or use our online catalog: www.telegaertner.com

DATA VOICE OFFICE

Networking components for office applications.

COAX

RF components and much more.

DATA VOICE INDUSTRY

Networking components for industrial applications.

Telegärtner
Karl Gärtner GmbH

Lerchenstr. 35
D-71144 Steinenbronn

Telefon: +49 (0) 71 57 / 1 25-0
Telefax: +49 (0) 71 57 / 1 25-5120

E-Mail: info@telegaertner.com
Web: www.telegaertner.com

T00013A0240 2nd edition 09/16