

Rosenberger

Much More Than Technology

FTTA & PTTA

Next Generation Site Solutions for All Architectures

SITE SOLUTIONS





Rosenberger Site Solutions – Much More Than Technology

The Rosenberger Site Solutions Group designs, manufactures and provides solutions for the wireless infrastructure market. Our products and systems offer innovative and leading-edge designs with focus on high performance and quality. Having an efficient network implementation in mind, we focus on total site kitting, logistics and delivery time leading to reduced cost of ownership. Globally present, the Rosenberger Site Solutions Group offers extensive local support making Rosenberger Site Solutions a partner instead of just a supplier.



Rosenberger

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Home of Innovation

A global network of Rosenberger research & development and production centers provides innovation, optimized cost structure and outstanding local customer service.



The Rosenberg headquarters located in Fridolfing in the southeast part of Bavaria, Germany

Rosenberger Worldwide

Rosenberger has more than 11,300 employees at the headquarters, manufacturing plants and sales offices in Europe, Asia as well as in North and South America, who are engaged in development, manufacture and sales of the products.

Rosenberger is always near you with its capable partners in the most important industrial countries when you need competent advice and trouble-free delivery on location.

In many countries, Rosenberger subsidiaries are active in the manufacture of connectors and cable assemblies. This facilitates flexibility on location and provides a national element that can help in reducing tax and customs charges.

With the establishment of a European assembly and logistics center in eastern Hungary together with the complete manufacturing plants in China and India, Rosenberger has, on the one hand, established a sustainable competitive advantage by international comparisons, and on the other hand, makes a useful contribution to the industrial development of emerging economies.

Rosenberger Global Network

Company Headquarters

- Fridolfing, Germany

Europe

- Austria: Timelkam
- Denmark: Lyngø
- Germany: Augsburg, Laufen, Neuenbürg, Radeberg
- Hungary: Jászárokszállás, Jászberény, Nyírbátor, Taksony
- Italy: Vimercate
- Spain: Madrid
- Sweden: Kista, Vallentuna
- UK: Bradford



North America

- Mexico: Apodaca
- USA: Akron, Pennsauken, Lake Charles

South America

- Brazil: Cacapava - São Paulo
- Chile: Santiago



Asia

- China: Beijing, Dianshan Hu, Dongguan, Shanghai
- India: Manesar, Goa, Pune
- Japan: Tokyo
- Korea: Suwon-City

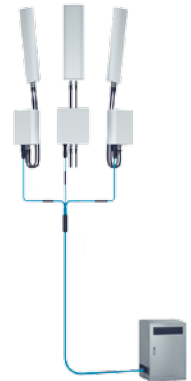
Site Solutions Overview

Next Generation **FIBER** Solutions for all Architectures

PreCONNECT® FIBER Trunk

Boxless Solutions

One fiber trunk with up to 12 pairs of optical fibers. For the connection to the RRHs separate fiber jumpers are used. For upgrading systems with unique or proprietary fiber interfaces, only jumpers require modification or replacement.

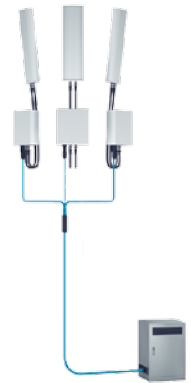


PreCONNECT® FIBER Trunk

Direct Solutions

One fiber trunk with up to 12 pairs of optical fibers. The fanouts of the fiber trunk are taken directly to the RRHs without the use of fiber optic jumpers.

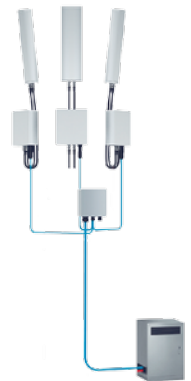
Extend or adapt the fanouts with the Rosenberger FiberInLine connector for upgrades or swaps.



PreCONNECT® FIBER Trunk

Box Solutions

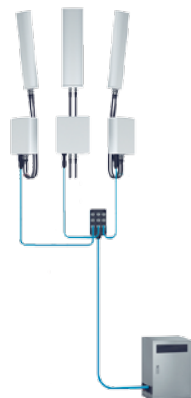
One fiber trunk with up to 24 pairs of optical fibers connected to a distribution box. For the connection to the RRHs separate fiber jumpers are used. For upgrading systems with unique or proprietary fiber interfaces, only jumpers require modification or replacement.



PreCONNECT® TMFS/TMFS EASY CLIC

Tower Mounted Fiber System

Modular fiber optic system with up to 48 pairs of fibers. Pre-assembled in factory and available with a multiple choice of outdoor fiber optic connectors for fast connection to RRHs using fiber optic jumper cables.

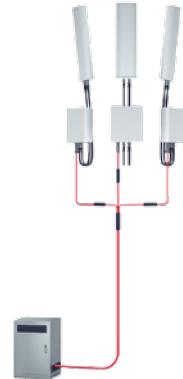


Next Generation **POWER** Solutions for all Architectures

PreCONNECT® POWER Trunk

Boxless Solutions

One power trunk with up to x-pairs of same sized cross-section wires, 6 mm², 10 mm² and 16 mm². For the connection to the RRHs separate power jumpers are used. For upgrading systems with unique or proprietary power interfaces, only jumpers require modification or replacement.

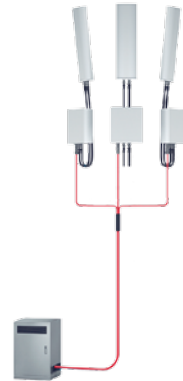


PreCONNECT® POWER Trunk

Direct Solutions

One power trunk with up to x-pairs of same sized cross-section wires, 6 mm², 10 mm² or 16 mm². Without any splicing the fanouts of the power trunk are taken directly to the RRHs without the use of power jumpers.

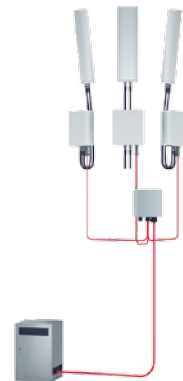
Extend or adapt the fanouts with the Rosenberger PowerInLine connector for upgrades or swaps.



PreCONNECT® POWER Trunk

Box Solutions

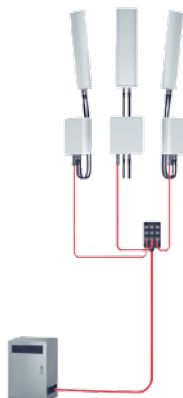
One power trunk with up to x-pairs of same sized cross-section wires either 6 mm², 10 mm² or 16 mm² or a 2-wire power cable up to 35 mm² connected to a distribution box. For the connection to the RRHs separate power jumpers are used. For upgrading systems with unique or proprietary power interfaces, only jumpers require modification or replacement.



PreCONNECT® TMPS/TMPS EASY CLIC

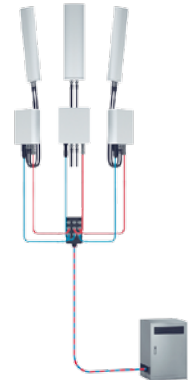
Tower Mounted Power System

Modular power system with up to 18 outdoor power connectors. Pre-assembled in factory and available with either 3, 6, 12 or 18 outdoor power connectors, DC or AC, for fast connection to RRHs using power jumpers.



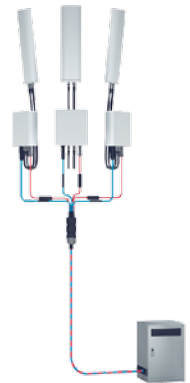
PreCONNECT® TMHS/TMHS EASY CLIC Tower Mounted Hybrid System

Modular fiber optic and power system for data and DC power to support multiple RRHs. Pre-assembled in factory for fast connection to RRHs using fiber and power jumper cables. For upgrading systems with unique or proprietary fiber or power interfaces, only jumpers require modification or replacement.



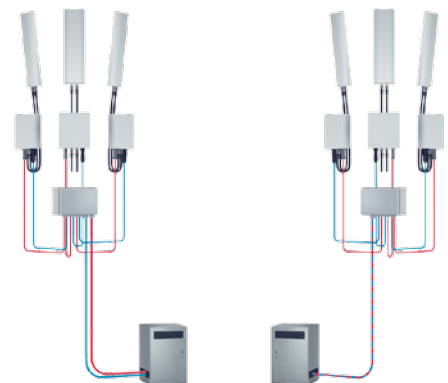
PreCONNECT® HYBRID Boxless Solutions

One single hybrid cable for both data and DC power to support multiple RRHs. The slim cable design provides for a spliceless, continuous cable connection from the BBU and power supply to the RRHs. Separate fiber and power jumpers are used from the hybrid cable to the RRHs. For upgrading systems with unique or proprietary interfaces, only jumpers require modification or replacement.



PreCONNECT® HYBRID Box Solutions

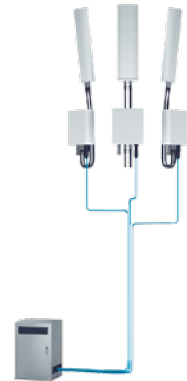
One single hybrid cable or two individual fiber and power trunks for data and DC or AC power supply. One hybrid box solution can support multiple RRHs in various configurations. Separate or hybrid fiber and power jumpers are connected from the hybrid box to the RRHs.



PreCONNECT® 2FO

Discrete Solutions

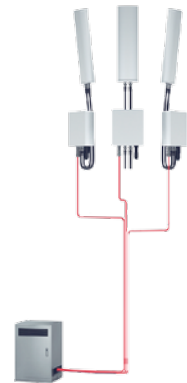
Ideal for single runs of fiber cable. Each RRH is directly connected to the BBU by one fiber cable.



PreCONNECT® POWER

Discrete Solutions

Ideal for single runs of power cable. Each RRH is directly connected to the PSU by one power cable.



PreCONNECT® BOXES

Next Generation **BOX** Solutions for all Architecture

The Rosenberger PreCONNECT® BOXES are available in standard and tailor-made configurations in volumes, low or high, to meet your specific requirements for reliable and easy-to-deploy connectivity boxes.

Designed and produced in-house at Rosenberger in Germany, our connectivity boxes provide the best workmanship and highest quality to ensure a long and smooth operation even in the most harsh environments.

The range of PreCONNECT® BOXES comprises:

- PreCONNECT® BOXES Fiber
- PreCONNECT® BOXES Power
- PreCONNECT® BOXES Hybrid

We Think Inside – and Outside the Box.



PreCONNECT® BOXES

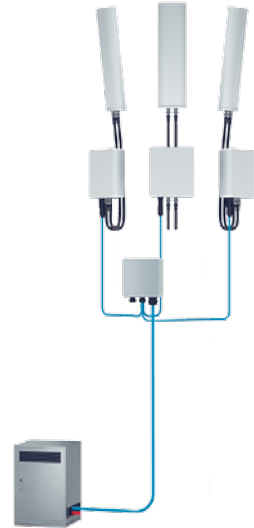
Rosenberger No.	Description
SLPDU005-03	PreCONNECT® PDU - 3 x Output, Multipower Cable, Shielded Output
SLPDU005-06	PreCONNECT® PDU - 6 x Output, Multipower Cable, Shielded Output
SLPDU046-03	PreCONNECT® PDU - 3 x Breaker B32A, 2-Wire Main Cable, Shielded Output
SLPDU046-06	PreCONNECT® PDU - 6 x Breaker B32A, 2-Wire Main Cable, Shielded Output
SLPDU046-06-C32	PreCONNECT® PDU - 6 x Breaker C32A, 2-Wire Main Cable, Shielded Output
SLPDU055-06	PreCONNECT® PDU - 6 x Breaker 3 x B32A 3 x B40A, 2 x 1 x 35 mm ² Individual Wires
SLPDU055-06-C32	PreCONNECT® PDU - 6 x Breaker C32A, 2 x 1 x 35 mm ² Individual Wires
SLPDU055-06-40	PreCONNECT® PDU - 6 x Breaker 6 x B40A, 2 x 1 x 35 mm ² Individual Wires
SLPDU058-00	PreCONNECT® PDU - 3 x SPD Class I 50kA, 3 x 2-Wire shielded in, 3 x 2-Wire shielded out
SLPDU058-02	PreCONNECT® PDU - 2 x SPD Class I 50kA, 2 x 2-Wire shielded in, 2 x 2-Wire shielded out
SLPDU058-01	PreCONNECT® PDU - 1 x SPD Class I 50kA, 1 x 2-Wire shielded in, 1 x 2-Wire shielded out
SLPDU058-03	PreCONNECT® PDU - 3 x SPD Class I 50kA, 3 x 2-Wire shielded in, 3 x 2-Wire shielded out
SLPDU059-00	PreCONNECT® PDU - ALU outdoor connection box, 2-Wire shielded in, 2-Wire shielded out
SLPDU061-06-20	PreCONNECT® PDU - 6 x Breaker B20A, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU061-06-32	PreCONNECT® PDU - 6 x Breaker B32A, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU062-00	PreCONNECT® PDU - SPD Class I 50kA, 2-Wire Main Cable, 5-Wire Shielded Output
SLPDU023-00	PreCONNECT® PDU - 2 x Breaker B50A, SPD Class I 25kA, 2 x 2-Wire Main Cable, Shielded Output
SLPDU023-01	PreCONNECT® PDU - SPD Class I 25kA, 2 x 2-Wire Main Cable, Shielded Output
SLPDU022-03-06	PreCONNECT® PDU - 3 x Breaker B6A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU022-03-20	PreCONNECT® PDU - 3 x Breaker B20A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU022-03-32	PreCONNECT® PDU - 3 x Breaker B32A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU022-06	PreCONNECT® PDU - 6 x Breaker B20A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU022-06-32	PreCONNECT® PDU - 6 x Breaker B32A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, Shielded Output
SLPDU022-G6	PreCONNECT® PDU - 6 x Breaker B20A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, plus grounding terminals, Shielded Output
SLPDU022-G6-32	PreCONNECT® PDU - 6 x Breaker B32A, SPD Class I 25kA, 2 x 2-Wire Shielded Main Cable, plus grounding terminals, Shielded Output
SLPDU052-00	PreCONNECT® PDU - SPD Class I 25kA, 2-Wire Shielded Main Cable, 2-Wire Shielded Cable Output
SLPDU063-03	PreCONNECT® PDU - 3 x Breaker B32A, 2-Wire Shielded Input. 3 x 2-Wire Shielded Output
SLPDU063-03-06	PreCONNECT® PDU - 3 x Breaker B6A, 2-Wire Shielded Input. Shielded Output
SLPDU064-03	PreCONNECT® PDU - 3 x 2-Wire Shielded Input. 3 x 2-Wire Shielded Output
SLPDU025-18	PreCONNECT® PDU - 19" 3 HU, 18 x Breaker C20A, SPD Class I 12,5kA Varistor
SLPDU048-20-B16	PreCONNECT® PDU - 19" 3 HU, 20 x Breaker B16A
SLHDU048-06	PreCONNECT® HDU - 12 x LCD, 6 x Breaker C20A, 2-Wire Main Cable, Shielded Output
SLHDU055-04	PreCONNECT® HDU - 4 x LCD, 4 x Breaker B4A, 2-Wire Shielded Main Cable, Shielded Output
SLHDU055-06	PreCONNECT® HDU - 6 x LCD, 6 x Breaker B4A, 2-Wire Shielded Main Cable, Shielded Output
SLHDU055-08	PreCONNECT® HDU - 8 x LCD, 8 x Breaker B4A, 2-Wire Shielded Main Cable, Shielded Output
SLHDU056-12-00	PreCONNECT® HDU - 12 x LCD, 2 x 2-Wire Main Cable (2 x up to 2 x 35 mm ²)
SLHDU056-12-2+4	PreCONNECT® HDU - 12 x LCD, 6 x Breaker C32A 2 + 4, 2 x 2-Wire Main Cable (2 x up to 2 x 35 mm ²)
SLHDU056-12-3+3	PreCONNECT® HDU - 12 x LCD, 6 x Breaker C32A 3 + 3, 2 x 2-Wire Main Cable (2 x up to 2 x 35 mm ²)
SLFDU004-06	PreCONNECT® FDU - 6 x LCD, IP66
SLFDU005-12	PreCONNECT® FDU - 12 x LCD, IP66
SLFDU008-18	PreCONNECT® FDU - 18 x LCD, IP66
SLFDU021-24	PreCONNECT® FDU - 24 x LCD, IP66

PreCONNECT® FIBER Trunk Box Solutions

One fiber trunk with up to 24 pairs of optical fibers connected to a distribution box. For the connection to the RRHs separate fiber jumpers are used. For upgrading systems with unique or proprietary fiber interfaces, only jumpers require modification or replacement.

Features and Benefits

- Multi-channel cable for harsh outdoor environment
- Single fiber trunk with 3 to 24 pairs
- LC connectors on both sides
- Operating temperature range -40 °C to +85 °C
- High UV resistance
- High crush resistance
- Factory assembled fiber optic connectors
- Factory tested Insertion Loss (IL) including test report
- Connectors and fanouts protected with installation tube



PreCONNECT® FIBER Distribution Box

Designed for tower as well as wall mounting, Rosenberger Fiber Distribution Boxes are available in various configurations to accommodate 3 to 24 pairs of fiber optic.

Features and Benefits

- 3 to 24 LC duplex adapters
- Ventilation seal to avoid moisture
- Mast and wall mount fixation
- Easy, efficient and safe installation
- IP67



PreCONNECT® FIBER Distribution Boxes

Rosenberger No.						
Single mode G.657A - 9/125	*Multi mode OM 3 - 50/125	Pairs	Fibers	Diameter	Connector Type	Distribution Box
L98B-A0757-xxx	L98D-472-xxx	6	12	7.3 mm	6 x LC-Compact > 6 x LC-Compact	SLFDU004-06
L98B-022-xxx	L98D-471-xxx	12	24	7.3 mm	12 x LC-Compact > 12 x LC-Compact	SLFDU005-12
L98B-069-xxx	L98D-479-xxx	18	36	10 mm	18 x LC-Compact > 18 x LC-Compact	SLFDU008-w18
L98B-235-xxx	L98D-480-xxx	24	48	10 mm	24 x LC-Compact > 24 x LC-Compact	SLFDU021-24

Further configurations available on request

xxx = length between cable

*OM 4 available on request

For related jumper cable, please go to page 38

PreCONNECT® FIBER Trunk

Boxless Solutions

The Fiber Trunk Boxless Solution utilizes one fiber trunk with up to 12 pairs of optical fiber.

For connection to the RRHs separate fiber jumpers are used. For up-grading systems with unique or proprietary fiber interfaces, only jumpers require modification or replacement.

Features and Benefits

- Multi-channel cable for harsh outdoor environment
- Single fiber trunk with up to 12 pairs
- Rosenberger Duplex Connector (RDC) at tower top; LC connectors at tower bottom
- Operating temperature range -40 °C to +85 °C
- High UV resistance
- High crush resistance
- Factory assembled fiber optic connectors
- Factory tested Insertion Loss (IL) with test report
- Connectors and fanouts protected



PreCONNECT® FIBER Trunk Boxless Solutions

Rosenberger No.					
Single mode G.657A - 9/125	*Multi mode OM 3 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-128-xxx	L98D-448-xxx	6	12	7.3 mm	RDC > LC Duplex
L98B-A0744-xxx	L98D-449-xxx	12	24	7.3 mm	RDC > LC Duplex
On request	On request	18	36	10 mm	RDC > LC Duplex
On request	On request	24	48	10 mm	RDC > LC Duplex

Further configurations available on request
xxx = length between cable dividers in mm
*OM 4 available on request

For related jumper cable, please go to page 38



Fiber Trunk with RDC and LC connectors

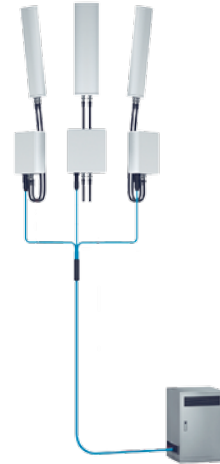
PreCONNECT® FIBER Trunk Direct Solutions

One fiber trunk with up to 12 pairs of optical fibers. The fanouts of the fiber trunk are taken directly to the RRHs without the use of fiber optic jumpers.

Extend or adapt the fanouts with the Rosenberger FiberInLine connector for upgrades or swaps.

Features and Benefits

- Multi-channel cable for harsh outdoor environment
- Single fiber trunk with up 12 pairs
- LC connectors at tower top and bottom
- All commonly used IP seals to protect fiber optic interfaces
- Operating temperature range -40 °C to +85 °C
- High UV resistance
- High crush resistance
- Factory assembled fiber optic connectors
- Factory tested Insertion Loss (IL) with test report
- Connectors and fanouts protected with installation tube



PreCONNECT® - 12 FO Direct for Huawei



PreCONNECT® - 12 FO Direct for Nokia



PreCONNECT® - 12 FO Direct for Ericsson

PreCONNECT® FIBER Trunk Direct

Rosenberger No.					
Single mode G.657A - 9/125	Multi mode *OM 3 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-A0745-xxx		6	12	7.3 mm	LCC > LCC Duplex with RFE for Ericsson
L98B-A0746-xxx		12	24	7.3 mm	LCC > LCC Duplex with RFE for Ericsson
L98B-A0909-xxx	L98D-450-xxx	6	12	7.3 mm	LCC > LCC Duplex with IP-Seal for Nokia
	L98D-451-xxx	12	24	7.3 mm	LCC > LCC Duplex with IP-Seal for Nokia
L98B-A0783-xxx		6	12	7.3 mm	LCC > LCD Duplex for Huawei
L98B-A0877-xxx		12	24	7.3 mm	LCC > LCD Duplex for Huawei

Further configurations available on request

xxx = length between cable dividers in mm

*OM 4 available on request

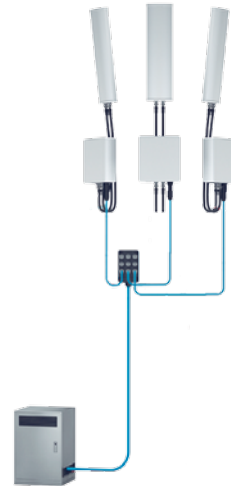
PreCONNECT® TMFS

Tower Mounted Fiber System

The Rosenberger Tower Mounted Fiber System offers a major advantage in terms of flexibility and installability. The fiber trunk is terminated in a fiber housing ensuring full individual fiber protection and minimum windload. Easy to install on either towers or rooftops, the TMFS one-piece design features different connector options to meet your requirements.

Features and Benefits

- Distribution unit with factory mounted multifiber cable
- Modular design with up to 48 fiber pairs
- Connector options for jumper connection: LC, MTP®/MPO, RDC, RQC, Q-RMC
- Operating temperature range -40 °C to +85 °C
- IP67
- High UV resistance
- High crush resistance
- Factory assembled FO connectors
- Factory tested Insertion Loss (IL) including test report



PreCONNECT® TMFS (6 x LCD)

PreCONNECT® TMFS (12 x LCD)

PreCONNECT® TMFS (24 x RDC)

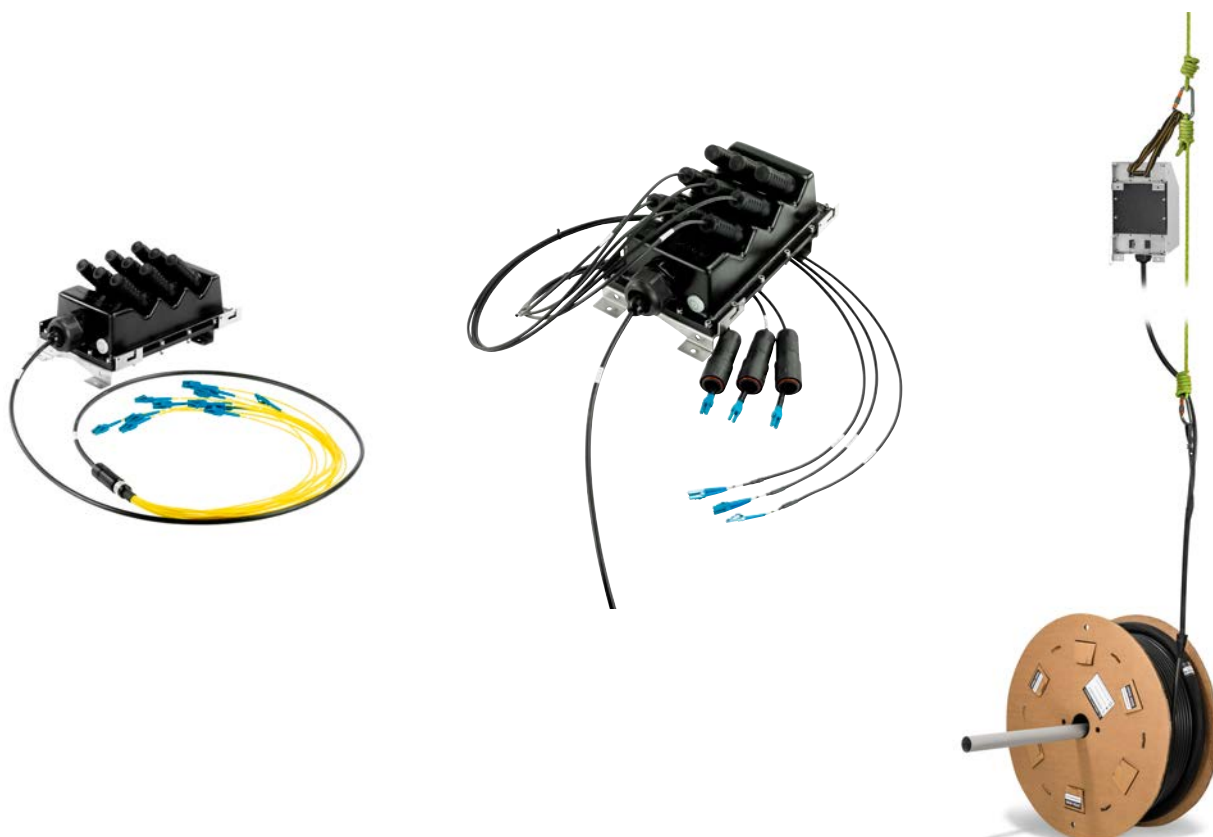


PreCONNECT® TMFS Tower Mounted Fiber System

Rosenberger No.					
Single mode G.657A - 9/125	Multi mode OM 3/OM 4 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-A0652-xxx	On request	6	12	7.3 mm	6 x LCD Boot
L98B-A0653-xxx	On request	6	12	7.3 mm	6 x RDCf
L98B-A0654-xxx	On request	12	24	7.3 mm	12 x LCD Boot
L98B-A0655-xxx	On request	12	24	7.3 mm	12 x RDCf
L98B-A0656-xxx	On request	18	36	10 mm	18 x LCD Boot
L98B-A0676-xxx	On request	12	24	10 mm	3 x MTP®/MPO + 12 x LCD Boot

Further configurations available on request
xxx = length between cable dividers in mm

For related jumper cable, please go to page 38



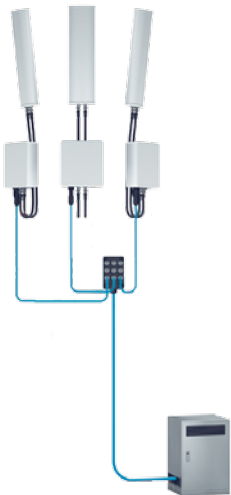
PreCONNECT® TMFS EASY CLIC Tower Mounted Fiber System

The Rosenberger TMFS EASY CLIC system provides the most ideal installation scenario. Fitting current requirements as well as anticipating future expansions, the fiber trunk is pre-wired for direct connection to a sealed bulkhead enclosure – from which fiber optic jumpers are taken to the RRHs.

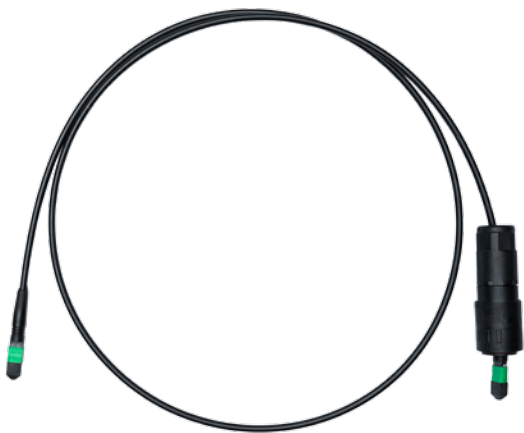
The ideal Plug & Play Solution.

Features and Benefits

- Modular design with up to 48 fiber pairs
- Non-proprietary fiber optic interfaces
- Connector options for jumper connection: LC, MTP®/MPO, RDC, RQC, Q-RMC
- Efficient and safe installation
- Minimum workmanship on site
- Minimized installation errors
- Operating temperature range -40 °C to +85 °C
- IP67
- High UV resistance
- High crush resistance



TMFS EASY CLIC Feeder MTP®/MPO to MTP®/MPO



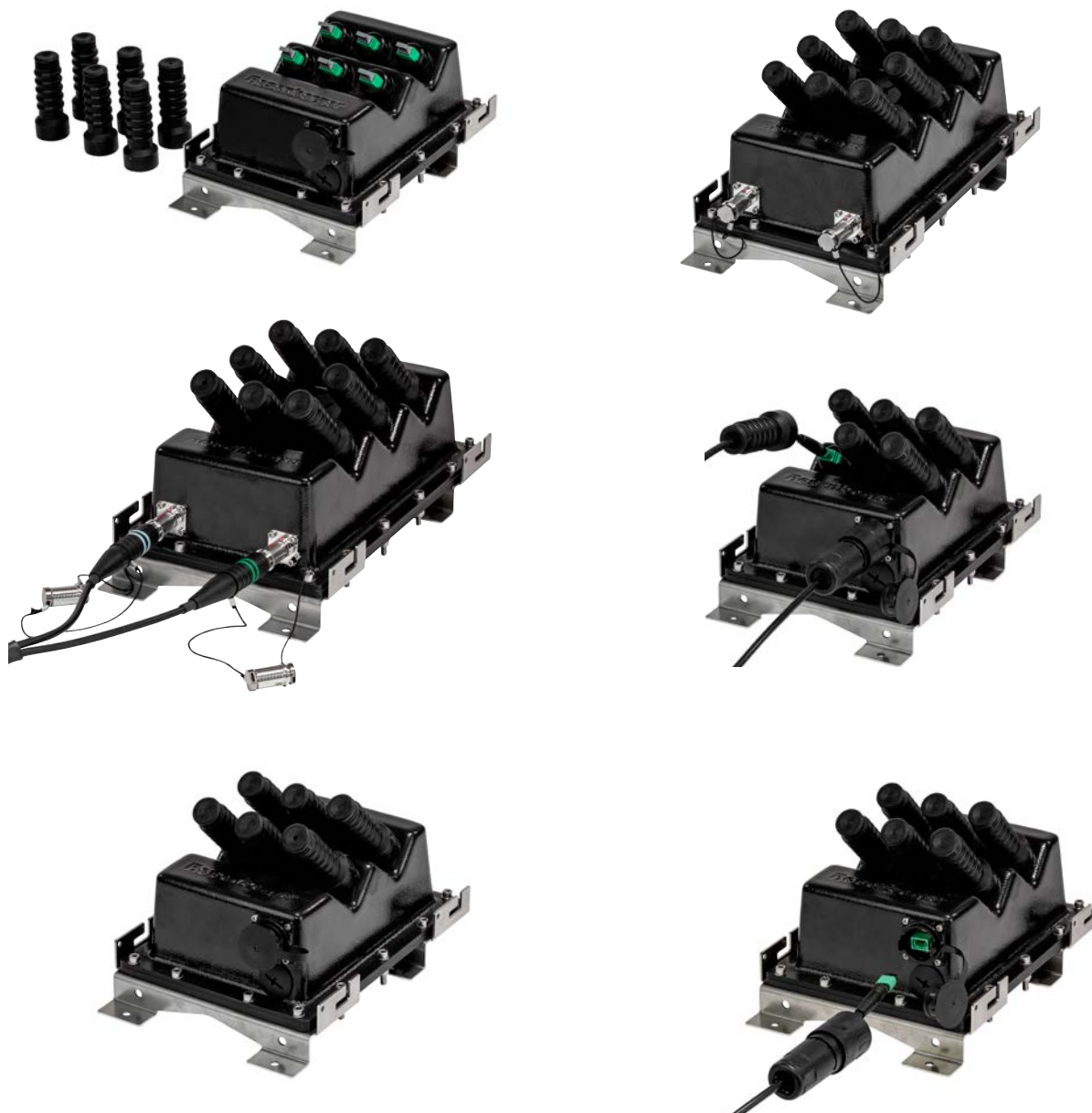
TMFS EASY CLIC Feeder MTP®/MPO to MTP®/MPO

TMFS EASY CLIC Feeder

Rosenberger No.					
Single mode G.657A - 9/125	Multi mode OM 3/OM 4 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-A0915-xxx	On request	6	12	7.3 mm	6 x LCC to 1 x MTP®/MPO with RFE
L98B-A0900-xxx	On request	12	24	7.3 mm	12 x LCC to 1 x MTP®/MPO with RFE
L98B-A0916-xxx	On request	6	12	6 mm	6 x LCC to 1 x Q-RMC

Further configurations available on request
xxx = length between cable dividers in mm

Field installable IP 67 fiber boots



TMFS EASY CLIC Tower Mounted Fiber System

Rosenberger No.	
SLTFMS005-06	12FO SM, output 6 x LCD with RFB for 6 RRHs, input 1 x Q-RMC
SLTFMS004-06	12FO SM, output 6 x LCD with RFB for 6 RRHs, input 1 x MTP®/MPO with RFE
SLTFMS004-12	24FO SM, output 12 x LCD with RFB for 12 RRHs, input 1 x MTP®/MPO with RFE
SLTFMS001-06	24FO SM, output 6 x MTP®/MPO with RFB for 6 RRHs, input 1 x MTP®/MPO with RFE

Further configurations available on request



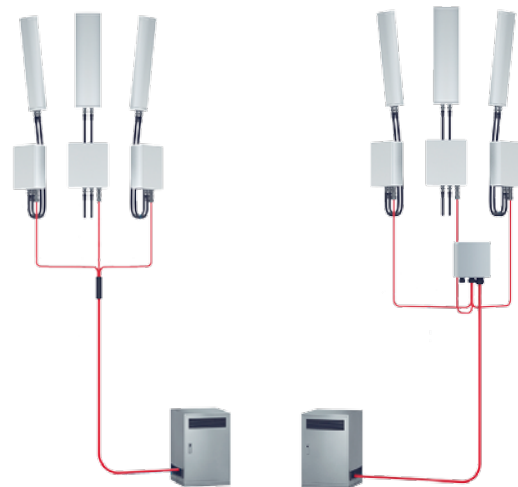


PreCONNECT® POWER

Direct or Box Solutions

Features and Benefits

- Conformity with EU regulations
- CPR-rating B2ca
- Small dimensions
- Less weight
- Small bending radius
- Less windload
- Easy stripping and handling
- Time saving
- One cable clamp for all cable dimensions



Cross Section [mm²]	6		10			16			25			35
Cable Type	SL2C	NYCY	SL2C	NYCWY	H07RN-F	SL2C	NYCWY	H07RN-F	SL2C	NYCWY	H07RN-F	SL2C
Wire Class	5	1	5	1	5	5	1	5	5	1	5	5
Weight [kg/km]	161	430	237	612	538	346	840	744	731	1299	1074	1061
Diameter [mm]	9.4	17.0	10.7	19.4	17.7	12.5	20.4	20.2	16.4	24.4	24.3	19.8
Min. Bending Radius [mm]	47.0	204.0	53.5	232.8	54	62.5	244.8	78.6	82	292.8	97.2	100

Comparative table: Rosenberger SL2CXX compared to other power cable types



One cable clamp size for all cable dimensions (6 mm² up to 25 mm²)

Rosenberger No. 6 wire	SL6C4FRNC-S-BK	SL6C6FRNC-S-BK	SL6C10FRNC-S-BK	SL6C16FRNC-S-BK
Weight	303 kg/km	500 kg/km	820 kg/km	1200 kg/km
Operating voltage	300 V	300 V	300 V	300 V
20 °C conductor DC resistance	5.1 Ω/km	3.3 Ω/km	1.91 Ω/km	1.21 Ω/km
Conductor size	4 mm²	6 mm²	10 mm²	16 mm²
Jacket diameter	Ø 12.5 mm	Ø 15.8 mm	Ø 19.5 mm	Ø 22.8 mm

Rosenberger No. 12 wire	SL12C4FRNC-S-BK	SL12C6FRNC-S-BK	SL12C10FRNC-S-BK	SL12C16FRNC-S-BK
Weight	582 kg/km	930 kg/km	1430 kg/km	2130 kg/km
Operating voltage	300 V	300 V	300 V	300 V
20 °C conductor DC resistance	5.1 Ω/km	3.3 Ω/km	1.91 Ω/km	1.21 Ω/km
Conductor size	4 mm²	6 mm²	10 mm²	16 mm²
Jacket diameter	Ø 17.5 mm	Ø 21.1 mm	Ø 24.8 mm	Ø 28 mm

Further configurations available on request
xxx = length in mm

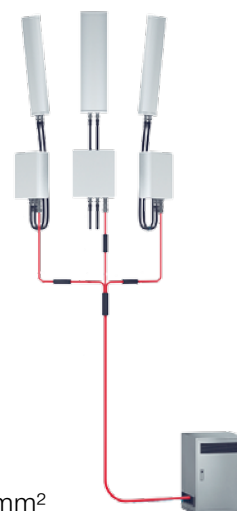
PreCONNECT® POWER

Trunk Boxless Solutions

The Rosenberger Power Trunk design provides a slim and easy to install neutral point of interface. Each power cable can be connected either directly to a RRH or to power jumpers utilizing the Rosenberger PowerInLine connector. Eliminating potential issues with windload and rental fees, the PowerInLine connector provides the same flexibility as that of a power distribution box.

Features and Benefits

- Power Trunk for 3 or 6 RRHs
- Easy installation
- Feasible for box and boxless installation
- Available in 6 mm², 10 mm², 16 mm²
- Shielded with aluminum foil
- Low smoke zero halogen
- Rosenberger PowerInLine connector for flexible installation
- 360° EMI shielding
- Suitable for shielded 2-wire power cables and coaxial power cables from 1 – 10 mm²



Power trunk with PowerInLine connector



Power Feeder Trunk Boxless

Rosenberger No.	Description
SL3x6FRNC-S-BK	Multipower cable 3 x 2 x 6 mm ² shielded
SL6x6FRNC-S-BK	Multipower cable 6 x 2 x 6 mm ² shielded
SL3x10FRNC-S-BK	Multipower cable 3 x 2 x 10 mm ² shielded
SL6x10FRNC-S-BK	Multipower cable 6 x 2 x 10 mm ² shielded
SL3x16FRNC-S-BK	Multipower cable 3 x 2 x 16 mm ² shielded
SL6x16FRNC-S-BK	Multipower cable 6 x 2 x 16 mm ² shielded
SD007-25-xxx	25 mm ² power cable 2-wire shielded with 3 x power connector on top end

For power jumpers please refer to page 38

PreCONNECT® PowerInLine Connector

Rosenberger No.	Description
99C084-000N1	PowerInLine connector 1-10 mm ²
7F2RS105B-0M16T1	Power connector for TMPS and various RRHs, 3 wire 55A/60VDC
7F2RS106B-0M16T1	Power connector for TMPS and various RRHs, 1 wire 55A/60VDC

Further configurations available on request

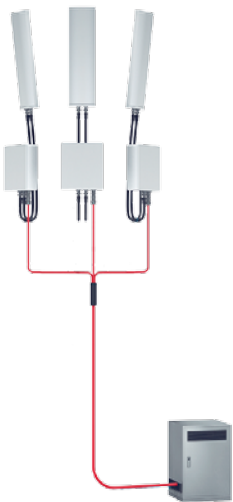
PreCONNECT® POWER

Trunk Direct Solutions

One power trunk with up to x-pairs of same sized cross-section wires either 6 mm², 10 mm² or 16 mm². The fanouts of the power trunk are taken directly to the RRHs without the use of power jumpers – no splicing. Extend or adapt the fanouts with the Rosenberger PowerInLine connector for upgrades or swaps.

Features and Benefits

- Power Trunk for 3 or 6 RRHs
- Factory assembled
- Power handling up to 1500 W per port dependent on cross-section and length
- Operating temperature range -40 °C to +85 °C
- IP67
- High UV resistance
- High crush resistance
- Easy extension, upgrade or swap with the Rosenberger PowerInLine connector



Trunk Direct (Coaxpower)

Direct Power System

Rosenberger No.	No. of Ports
SLFP0606-5.0-xxx	6 x 2 x 6 mm ² for 6 RRHs, Fanout 5 m - Coaxpower
SLFP0610-5.0-xxx	6 x 2 x 10 mm ² for 6 RRHs, Fanout 5 m - Coaxpower
SLFP20306-5.0-xxx-R	3 x 2 x 6 mm ² for RRHs, Fanout 5 m - 2 wire shielded elements, red&white
SLFP20310-5.0-xxx-R	3 x 2 x 10 mm ² for RRHs, Fanout 5 m - 2 wire shielded elements, red&white
SLFP20606-5.0-xxx-R	6 x 2 x 6 mm ² for RRHs, Fanout 5 m - 2 wire shielded elements, red&white
SLFP20610-5.0-xxx-R	6 x 2 x 10 mm ² for RRHs, Fanout 5 m - 2 wire shielded elements, red&white

Further configurations available on request
xxx = length in mm

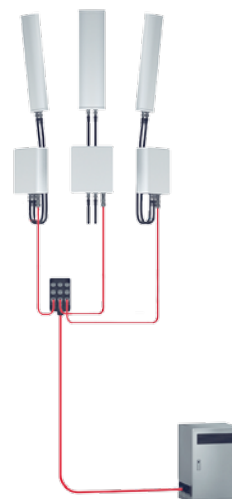
PreCONNECT® TMPS

Tower Mounted Power System

The Rosenberger Tower Mounted Power System offers a major advantage in terms of flexibility and installability. The power trunk is prewired and terminated in a housing thus ensuring individual power cable protection and minimum windload. Easy to install on either towers or rooftops, the TMPS one-piece design features the Rosenberger robust outdoor connectors for direct connection to power jumpers.

Features and Benefits

- Factory assembled
- Power handling up to 1500 W per port dependent on cross-section and length
- Operating temperature range -40 °C to +85 °C
- Distribution unit with up to 18 outdoor power connectors, DC or AC
- IP67
- High UV resistance
- High crush resistance



Tower Mounted Power System

Tower Mounted Power System

Rosenberger No.	No. of Ports
L99-P085-xxx	6 x 6 mm ² (3 RRHs)
L99-P084-xxx	12 x 6 mm ² (6 RRHs)
L99-P080-xxx	18 x 4 mm ² (9 RRHs)

Further configurations available on request
xxx = length in mm

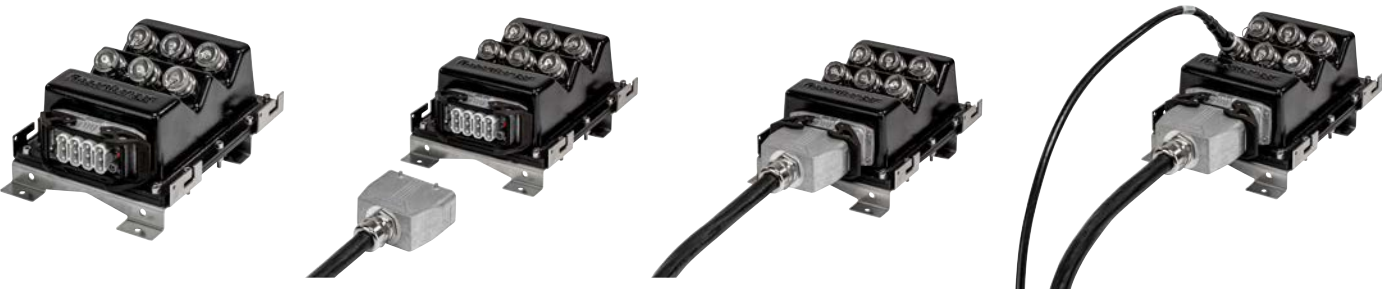
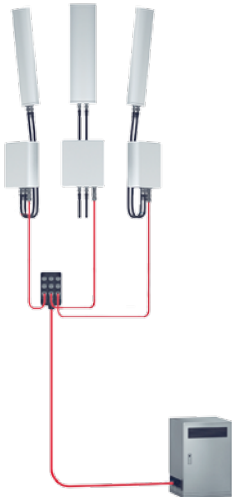
For power and fiber jumper feeder please refer to page 38

PreCONNECT® TMPS EASY CLIC Tower Mounted Power System

The Rosenberger TMPS EASY CLIC system provides the most ideal installation scenario. Fitting current requirements as well as anticipating future expansions, the power trunk is pre-wired for direct connection to a sealed bulkhead enclosure – from which power jumpers are taken to the RRHs. The ideal plug & play solution.

Features and Benefits

- Factory assembled
- Distribution unit
 - Output: Up to 12 outdoor power connectors, DC and AC
 - Input: One multipower connector
- Non-proprietary power interfaces
- Efficient and safe installation
- Minimum workmanship on site
- Minimized installation errors
- Operating temperature range -40 °C to +85 °C
- IP 67
- High UV resistance
- High crush resistance
- Power handling up to 1500 W per port dependent on cross-section and length
- Operating temperature range -40 °C to +85 °C



TMPS EASY CLIC Tower Mounted Power System

Rosenberger No.	No. of Ports
SLTMPS004-03	For 3 RRHs, max. 40 A per radio
SLTMPS004-06	For 6 RRHs, max. 40 A per radio

TMPS EASY CLIC Feeder

Rosenberger No.	Description
L99-P113-xxx	6-pin multipower connector with 6 x 6 mm ² shielded
L99-P114-xxx	6-pin multipower connector with 6 x 10 mm ² shielded
L99-P115-xxx	12-pin multipower connector with 12 x 6 mm ² shielded
L99-P116-xxx	12-pin multipower connector with 12 x 10 mm ² shielded

Further configurations available on request
xxx = length in mm

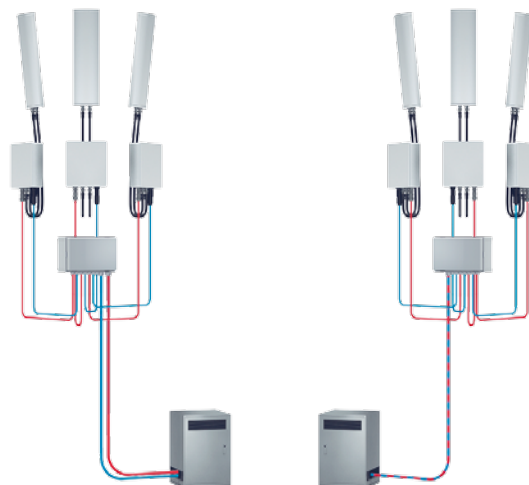
PreCONNECT® HYBRID Box Solutions

The Rosenberger Hybrid Box Solution provides an option for both data and power supply. One Hybrid Box Solution can support multiple RRHs in various configurations. The hybrid cable (or alternatively two individual fiber and power trunks) are terminated in a Hybrid Distribution Box.

Separate fiber and power jumpers are used for the connection to RRHs.

Features and Benefits

- Fiber and power distribution and management
- OVP integrated as an option
- Pre-connectorized and wired
- IP66
- Wall or mast mounting
- Easy-to-install mounting brackets
- High UV resistance
- High crush resistance



Hybrid distribution box with and without OVP

Hybrid Distribution Box

Rosenberger No.	No. of Ports
SLHDU006-xxx	Hybrid box with surge protection for 6 RRHs
SLHDU054-xx	Hybrid box without surge protection for 6 RRHs
SLHDU057-xx	Hybrid box without surge protection
SLHDU055-xx	Hybrid box for separate power and fiber feeder cable with SPD, xx breakers, 12 fibers
SLHDU056-xx-xx	Hybrid box for separate power and fiber feeder cable without SPD, xx breakers, 24 fibers

Further configurations available on request

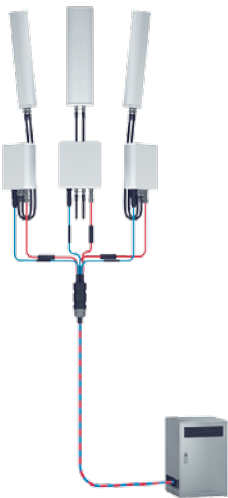
PreCONNECT® HYBRID

Boxless Solutions

The Rosenberger Hybrid Boxless Solution provides a single cable option for both data and DC power. One hybrid cable supports multiple RRHs. The slim and flexible cable design reduces overall network implementation costs. The unique design allows a spliceless, continuous cable connection from BBU to RRH. Fiber and power jumpers are used from the hybrid trunk to the RRHs.

Features and Benefits

- Easy and fast installation
- Small bending radius and outer cable diameter
- Single hybrid trunk with multiple fiber and coaxial power cables
- Sturdy slim profile canister dividing fiber and power cables
- No splice connection inside the canister
- No distribution box required
- RDC outdoor connectors for mounting of jumpers towards RRHs and LC connectors towards BBU
- IP67
- High UV resistance
- High crush resistance
- Factory assembled fiber optic connectors
- Hybrid cable shielded with aluminum foil
- Factory assembled fiber optic connectors
- Factory tested Insertion Loss (IL) including test report
- Connectors and fanouts protected with installation tube



Hybrid Boxless

Hybrid Boxless

Rosenberger No.					
Single mode G.657A - 9/125	*Multi mode OM 2 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-237-xxx	L98C-086-xxx	6 x RDC – 6 x LCD + 3 x 6 mm ² Coax	12	5/8"	RDC > LC Duplex
L98B-201-xxx		3 x RDC – 3 x LCD + 3 x 10 mm ² Coax	12	7/8"	RDC > LC Duplex

Further configurations available on request

xxx = length in mm

*OM 4 available on request

For jumper cables please refer to page 38

PreCONNECT® TMHS/TMHS EASY CLIC

Tower Mounted Hybrid System

Rosenberger Tower Mounted Hybrid System offers a major advantage in terms of flexibility and installability. The hybrid trunk is prewired and terminated in a housing thus ensuring individual cable protection and minimum windload. Easy to install on either towers or rooftops, the TMHS one-piece design features the Rosenberger robust outdoor connectors for direct connection to power and fiber jumpers.

Features and Benefits

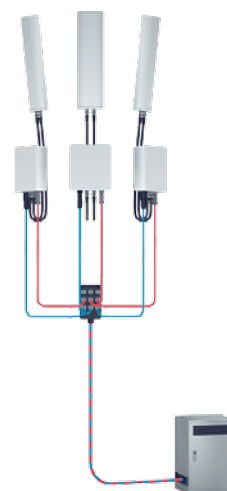
- Factory assembled
- Modular design
- Outdoor power connectors
- Connector options for jumper connection: LC, MTP®/MPO, RDC, RQC, Q-RMC
- Power handling up to 1500 W per port
- Operating temperature range -40 °C to +85 °C
- IP67
- High UV resistance
- High crush resistance



PreCONNECT® TMHS (6 x LCD + 3 x Power)



PreCONNECT® TMHS (12 x LCD + 6 x Power)



Rosenberger No.		Description	Fibers	Power	Diameter
Single mode G.657A - 9/125	*Multi mode OM 3 - 50/125				
L98B-A0657-xxx		6 x LCD – 6 x LCD + 3 x 6 mm ²	12	3	23 mm
L98B-A0658-xxx		6 x RDC – 6 x LCD + 3 x 6 mm ²	12	3	23 mm
L98B-A0689-xxx		6 x RDC – 6 x LCD + 6 x 6 mm ²	12	6	26 mm
L98B-A0755-xxx		6 x LCD – 6 x LCD + 6 x 6 mm ²	12	6	26 mm
L98B-A0758-xxx	L98D-463-xxx	6 x LCD – 6 x LCD + 6 x 10 mm ²	12	6	28 mm
L98B-A0759-xxx		6 x RDC – 6 x LCD + 6 x 10 mm ²	12	6	28 mm
L98B-A0338-xxx		12 x RDC – 12 x LCC + 4 x 230V AC connection	24	4	19.7 mm

Further configurations available on request

xxx = length in mm

*OM 4 available on request

For jumper cables please refer to page 38

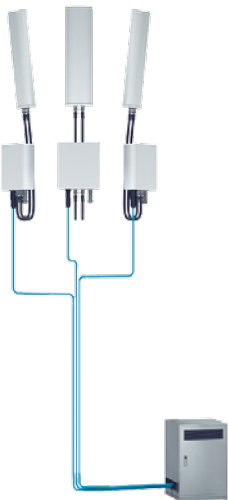
PreCONNECT® 2FO

Discrete Solutions

Discrete Fiber Solutions are ideal for harsh outdoor environments.

Features and Benefits

- Operating temperature range -40 °C to +85 °C
- High UV resistance
- High crush resistance
- Both sides factory assembled with fiber optic connectors
- Single data channel in one cable
- Standard light propagation „channelwise crossed“ (pairwise flipped)



Fiber feeder



Fiber feeder with OCTIS



Rosenberger fiber enclosure (RFE)

Discrete Cabling Solution

Fiber Feeder Standard

Rosenberger No.				
Single mode G.657A - 9/125	*Multi mode OM 3 - 50/125	in Combination with RFE	Connector Type	OEM
L98B-A0195-xxx			LCD - LCC	Ericsson
L98B-003-xxx	L98C-023-xxx	98Z111-S04	LCD - LCD	Ericsson
L98B-A0859-xxx	L98D-227-xxx		LCD - LCD	Nokia
L98B-003-xxx	L98C-023-xxx		LCD - LCD	Huawei
L98B-A1015-xxx			LCD - OCTIS	Nokia
L98B-A0646-xxx			MTP®/MPO - MTP®/MPO	
L98B-A0647-xxx	L98D-181-xxx		MTP®/MPO - MTP®/MPO	
L98B-A0878-xxx	L98D-182-xxx		MTP®/MPO - MTP®/MPO	
L98B-A0879-xxx			MTP®/MPO - MTP®/MPO	
L98B-A0880-xxx			MTP®/MPO - MTP®/MPO	

Further configurations available on request
 xxx = length in mm
 *OM 4 available on request

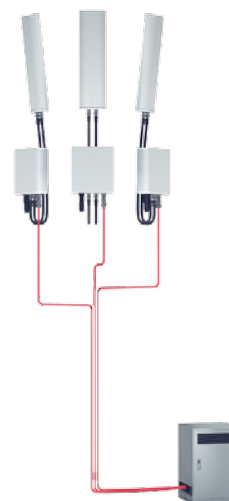
PreCONNECT® POWER

Discrete Solutions

Power Cabling Solutions are ideal for harsh outdoor environments.

Features and Benefits

- Conformity with EU regulations
- CPR-rating B2ca
- Small dimensions
- Less weight
- Small bending radius
- Less windload
- Easy stripping and handling
- Time saving
- One cable clamp for all cable dimensions



Cross Section [mm²]	6		10			16			25			35
Cable type	SL2C	NYCY	SL2C	NYCWY	H07RN-F	SL2C	NYCWY	H07RN-F	SL2C	NYCWY	H07RN-F	SL2C
Wire class	5	1	5	1	5	5	1	5	5	1	5	5
Weight [kg/km]	1061	430	237	612	538	346	840	744	731	1299	1074	1061
Diameter [mm]	9.4	17.0	10.7	19.4	17.7	12.5	20.4	20.2	16.4	24.4	24.3	19.8
Min. bending radius [mm]	47.0	204.0	53.5	232.8	54	62.5	244.8	78.6	82	292.8	97.2	100

Comparative table: Rosenberger SL2CXX compared to other power cable types



Jumper Cables

Rosenberger offers a wide range of jumper cables to meet industry standard requirements including required IP protection.



Product Overview

- Fiber optic jumper cables
- OEM interfaces
- Power jumper cables
- Patch cords, indoor
- CATx cables, indoor and outdoor

Rosenberger fiber optic and power jumper cables in combination with the outdoor Rosenberger InLine connectors offer a flexible and easy upgradable solution.

OEM Fiber Interfaces

E///

Rosenberger No.				
Single mode G.657A - 9/125	Multi mode OM 2 - 50/125	*Multi mode OM 3 - 50/125	RFE additionally needed	Connector Type
L98B-003-XXX		L98C-023-XXX	yes	LCD – LCD
L98B-091-XXX			included	RDC – LCD for PreCONNECT® BOXLESS incl. RFE
L98B-A0709-xxx			yes	LCC – LCD for PreCONNECT® TMFS
98Z111-S04				RFE – Rosenberger Fiber Enclosure

Further configurations available on request

xxx = length in mm

*OM 4 available on request

Huawei

Rosenberger No.			
Single mode G.657A - 9/125	Multi mode OM 2 - 50/125	*Multi mode OM 3 - 50/125	Connector Type
L98B-003-xxx		L98C-023-xxx	LCD – LCD
L98B-004-xxx	L98C-026-xxx		RDC – LCD for PreCONNECT® BOXLESS
L98B-A0709-xxx			LCC – LCD for PreCONNECT® TMFS

Further configurations available on request

xxx = length in mm

*OM 4 available on request

Nokia

Rosenberger No.			
Single mode G.657A - 9/125	Multi mode OM 2 - 50/125	*Multi mode OM 3 - 50/125	Connector Type
L98B-A0859-xxx	L98C-137-xxx	L98D-227-xxx	LCD – LCD
L98B-A0831-xxx	L98D-028-3000		RDC – LCD for PreCONNECT® BOXLESS
L98B-A0933-xxx			LCC – LCD for PreCONNECT® TMFS
L98B-A1015-xxx			LCD - OCTIS

Further configurations available on request

xxx = length in mm

*OM 4 available on request

Jumper with MTP®/MPO connectors

Rosenberger No.			
Single mode G.657A - 9/125	Multi mode OM 2 - 50/125	*Multi mode OM 3 - 50/125	Connector Type
L98B-A0646-XXX		L98D-181-XXX	MTP®/MPO(12FO) – MTP®/MPO(12FO)
L98B-A0883-XXX		L98D-228-XXX	MTP®/MPO(4FO) – 2xLCD
L98B-A0647-XXX		L98D-182-XXX	MTP®/MPO(8FO) – 4xLCD

Further configurations available on request

xxx = length in mm

*OM 4 available on request



Power Jumper Cables

Rosenberger Power Jumpers with their unique coaxial design provide highest flexibility. Compared to conventional two-wire cables, the Rosenberger coaxial power cables provide smaller bending radius and higher surge protection.

Features and Benefits

- Smaller diameter and higher flexibility compared to two-wire design
- Reduced wind load and weight
- 360° EMI shielding
- Low inductance
- Easy installation
- Small bending radius – higher surge protection
- Termination point for power supply independent of proprietary interface
- Available in 6 mm² or 10 mm²
- UV-resistant
- Rosenberger Power connector for Tower Mounted Power System and various RRH/Active Antennas



Power jumper with PowerInLine connector



Power jumper with power connector

Power Jumper

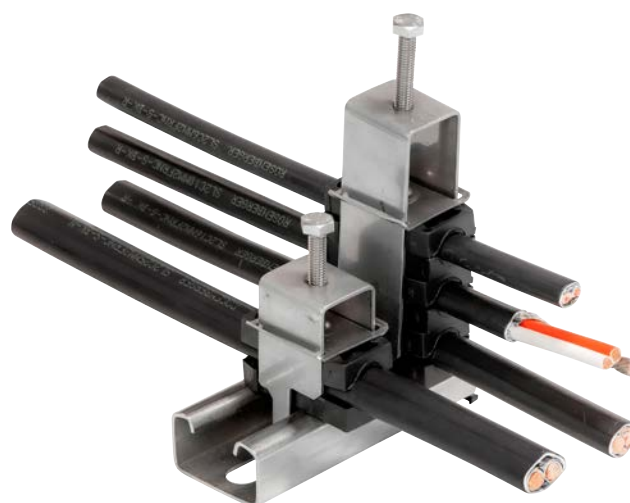
Rosenberger No.	Description
L99-P005-xxx	PowerInLine connector on 6 mm ² coaxial power cable
L99-P055-xxx	Power connector on 6 mm ² coaxial power cable
L99-P049-xxx	AC power connector
SL2CxxMM2FRNC-S-BK-N	Power cable shielded blue/grey
SL2CxxMM2FRNC-S-BK-R	Power cable shielded red/white
L99-P037-xxx	Jumper cable for SD007, 2 x 6 mm ² shielded

Jumper with 4 mm² and 10 mm² available on request

Rosenberger Power Cables acc. to DIN EN 60445

Power Cables

Rosenberger No.	Description
SL2C4MM2FRNC-S-BK-R	Power cable 2 x 4 mm ² , shielded, 9.2 mm (red/white)
SL2C6MM2FRNC-S-BK-R	Power cable 2 x 6 mm ² , shielded, 10.8 mm (red/white)
SL2C10MM2FRNC-S-BK-R	Power cable 2 x 10 mm ² , shielded, 13.6 mm (red/white)
SL2C16MM2FRNC-S-BK-R	Power cable 2 x 16 mm ² , shielded, 15.9 mm (red/white)
SL2C25MM2FRNC-S-BK-R	Power cable 2 x 25 mm ² , shielded, 20.4 mm (red/white)
SL2C35MM2FRNC-S-BK-R	Power cable 2 x 35 mm ² , shielded, 23.6 mm (red/white)



One cable clamp type can fix the cables from 2 x 6 mm² up to 2 x 25 mm² for efficient logistics



Power Cables

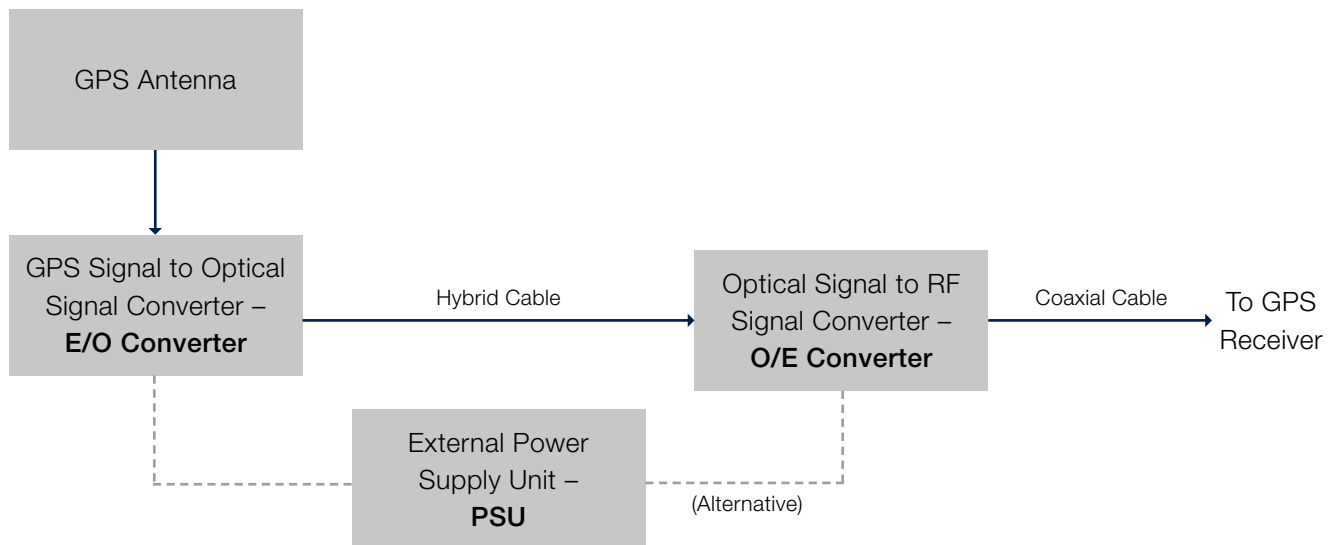
Rosenberger No.	Description
SL2C4MM2FRNC-S-BK-N	Power cable 2 x 4 mm ² , shielded, 9.2 mm (blue/grey)
SL2C6MM2FRNC-S-BK-N	Power cable 2 x 6 mm ² , shielded, 10.8 mm (blue/grey)
SL2C10MM2FRNC-S-BK-N	Power cable 2 x 10 mm ² , shielded, 13.6 mm (blue/grey)
SL2C16MM2FRNC-S-BK-N	Power cable 2 x 16 mm ² , shielded, 15.9 mm (blue/grey)
SL2C25MM2FRNC-S-BK-N	Power cable 2 x 25 mm ² , shielded, 20.4 mm (blue/grey)
SL2C35MM2FRNC-S-BK-N	Power cable 2 x 35 mm ² , shielded, 23.6 mm (blue/grey)

GPS over Fiber

Rosenberger offers an innovative GPS over Fiber system for applications where coax cable cannot be used to route the GPS signal to base stations as the distance is too long. The GPS over Fiber system converts the RF signal to light, transmits it over the fiber and then restores the light to the original RF signal.

Features and Benefits

- Makes distance between GPS antenna and technical room non critical
- Compact
- Small foot-print
- Easy to install



GPS over Fiber System

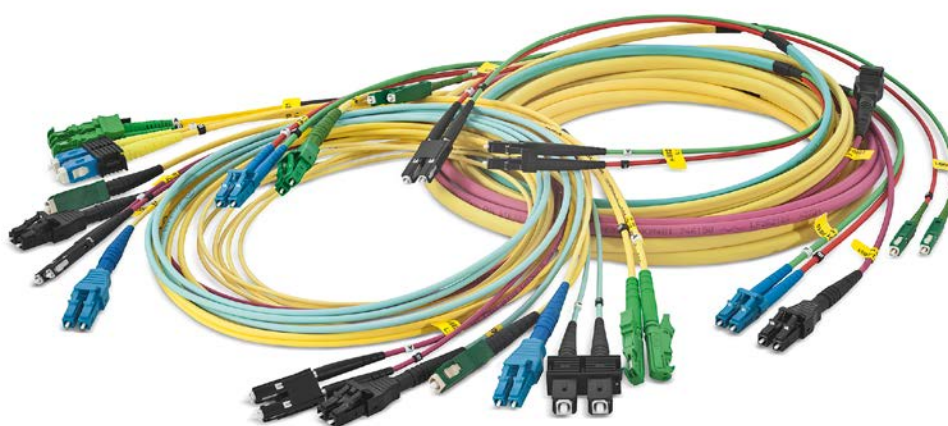
Rosenberger No.	Description
GPSGlonass-36-N-GA	GPS and Glonass antenna (outdoor)
98GOF002-TX	E/O converter (outdoor)
98GOF001-PSU	Power supply unit, PoE (outdoor)
98GOF002-PSU	Power supply unit, 230VAC (outdoor)
98GOF002-RX	O/E converter (indoor)
98GOF101-RX	O/E converter (indoor) incl. 19" fixation
98GOF102-RX	2 x O/E converter (indoor) incl. 19" fixation

Indoor Patch Cords

The Indoor Patch Cords provide the flexible Interconnection between the ODF and the BBU.

Features and Benefits

- Patch cords appropriate for use in indoor applications, such as mobile stations, shelters and office buildings
- Patch cords for other applications on request
- Optimized kink and crush resistance with regard to application requirements
- Operating temperature range -10 °C to +60 °C
- Standard light propagation



Indoor Patch Cords

Rosenberger No.						
Single mode G.657A - 9/125	Multi mode OM 2 - 50/125	*Multi mode OM 3 - 50/125	Pairs	Fibers	Diameter	Connector Type
L98B-A0157-xxx	L98C-117-xxx	L98D-218-xxx	1	2	2.8 mm	LC-Compact > LC-Compact
L98B-A0295-xxx		L98D-229-xxx			2 mm	LCD > LCD
L98B-A0141-xxx						LCD > SC/APC 8°
L98B-A0272-xxx						LCD > E2000HRL
L98B-A0308-xxx						E2000HRL > E2000HRL
L98B-A0600-xxx						SC/APC 8° > E2000HRL
L98B-A0140-xxx						SC/APC 8° > SC/APC 8°
L98B-A0008-xxx		L98D-230-xxx				SCD > LCD
L98B-A0011-xxx		L98D-231-xxx				SCD > FC
L98B-A0002-xxx						LCS > SC/APC 8°
L98B-A0005-xxx		L98D-232-xxx		1	2 mm	LCS > LCS
L98B-A0070-xxx						LCS > E2000HRL
L98B-A0085-xxx						SC/APC 8° > SC/APC 8°
L98B-A0197-xxx						E2000HRL > E2000HRL

Further configurations available on request

xxx = length between cable dividers in mm

*OM 4 available on request

Accessories



Product Overview

- FiberInLine
- PowerInLine
- Optical distribution frames
- Interior excess fiber cable enclosures
- Power connectors
- Cable clamps



Rosenberger FiberInLine

Rosenberger FiberInLine connector allows for an easy extension of an existing fiber optic installation.

Features and Benefits

- Easy and quick extension of existing fiber optic line
- Efficient and safe installation
- No replacement of existing fiber optic line



FiberInLine Connectors

Rosenberger No.	Description
98K100-130-L02	Flexible cable extension kit LCD adaptor
98K100-130-L04	Flexible cable extension kit MTP®/MPO adaptor

Rosenberger PowerInLine and Power Connector

The Rosenberger Power Connectors with their robust design provide a robust, 360° EMI shielded connection of power cables. The connectors are specifically designed to fit shielded or unshielded conventional two wire power cables as well as coaxial power cables. The Power connector is pluggable with the TMPS as well as various RRHs while the PowerInLine connector provides an independent termination point for the power supply without the need of a bulky power distribution box.

Features and Benefits

- 360° EMI-shielding
- Independent termination point with PowerInLine connector
- Direct connection to various RRHs and TMPS with power connector
- Suitable for conventional 2-wire power cables and coaxial power cables 1 - 10 mm²
- Low wind load
- IP68
- High UV resistance
- High crush resistance



Power Connector



PowerInLine Connector



Power Connector SLZ033-16M/F

Power Connectors

Rosenberger No.	Description
7F2RS106B-0M16T1	2 wire cable plug 55A/60VDC
7F2RS105B-0M16T1	3 wire cable plug 55A/60VDC
SLZ033-16M	3-pin male connector up to 2 x 16 mm ²
SLZ033-16F	3-pin female connector up to 2 x 16 mm ²
99C084-000N1	PowerInLine 2-pin shielded, 1 mm ² -10 mm ²

Optical Distribution Frames

The Rosenberger Optical Distribution Frame is designed for rack installation.

Features and Benefits

- Available with 3 to 24 LC duplex
- Easy, efficient and safe installation
- Material: unpainted steel
- Removable 19" rack ears included



Optical Distribution Frame

Optical Distribution Frames for Fiber Trunk

Rosenberger No.	Pairs	Fibers
SLODF001-xxx	3	6
SLODF051-xxx	6 to 24	12 to 48

Interior Excess Fiber Cable Enclosures

The Rosenberger Excess Fiber Cable Enclosure is designed for indoor on-site storage of excess fiber cable when pre-connected fiber cables are utilized.

Features and Benefits

- Material: unpainted steel
- Rack mount: removable 19" rack ears included
- Capacity: 20 or 30 meters of 10 mm cable + fanouts
- Mounting: wall or rack mount



Interior Excess Fiber Cable Enclosure

Interior Excess Fiber Cable Enclosures

Rosenberger No.		
Stainless Steel	Steel, Zinc Plated	Variant
SLFCS001-000	SLFCS009-000	1 HU without drawer
SLFCS003-000	SLFCS011-000	1 HU with drawer

Cable Clamps

For multiple cable runs on sites where space is limited. Without additional adaptors these clamps provide sturdy, reliable and long-term support.

C-Clamp for Flat, Round and Angular



C-Clamp Type Single

Rosenberger No.	Description	Size
SLCC111-03	Cable clamp for ½" R cables single	1 x ½" R
SLCC111-08	Cable clamp for ½" S cables single	1 x ½" S
SLCC121-03	Cable clamp for ½" R cables double	2 x ½" R
SLCC121-08	Cable clamp for ½" S cables double	2 x ½" S
SLCC131-03	Cable clamp for ½" R cables triple	3 x ½" R
SLCC131-08	Cable clamp for ½" S cables triple	3 x ½" S



C-Clamp Type Twin

Rosenberger No.	Description	Size
SLCC221-03	Cable clamp for ½" R cables single	2 x ½" R
SLCC221-08	Cable clamp for ½" S cables single	2 x ½" S
SLCC241-03	Cable clamp for ½" R cables double	4 x ½" R
SLCC241-08	Cable clamp for ½" S cables double	4 x ½" S
SLCC261-03	Cable clamp for ½" R cables triple	6 x ½" R
SLCC261-08	Cable clamp for ½" S cables triple	6 x ½" S



Hook Type Clamp for Section 40 x 22, Flat and Round 3-12 mm Structures

Rosenberger No.	Size
SLCC122-C03	2 x ½" R
SLCC122-C08	2 x ½" S
SLCC132-C03	3 x ½" R
SLCC132-C08	3 x ½" S
SLCC112-0408	1 x 4-8 mm
SLCC122-0408	2 x 4-8 mm
SLCC132-0408	3 x 4-8 mm
SLCC242-0408	4 x 4-8 mm
SLCC262-0408	6 x 4-8 mm
SLCC282-0408	8 x 4-8 mm
SLCC242-0710	4 x 7-10 mm
SLCC112-0814	1 x 8-14 mm
SLCC122-1x0814+1x08	1 x 8-14 mm + 1 x 7-8 mm
SLCC132-1x0814+2x0408	1 x 8-14 mm + 2 x 4-8 mm
SLCC132-1x0814+2x0710	1 x 8-14 mm + 2 x 7-10 mm
SLCC132-1x0814+2x05	1 x 8-14 mm x 2 x 5 mm
SLCC122-0814	2 x 8-14 mm
SLCC222-0408	2 x 8-14 mm
SLCC142-2x0814+2x05	2 x 8-14 mm + 2 x 5 mm
SLCC142-1x0814+2x05	2 x 8-14 mm + 2 x 5 mm
SLCC142-2x0814+2x08	2 x 8-14 mm + 2 x 8 mm
SLCC132-0814	3 x 8-14 mm
SLCC162-3x0814+3x08	3 x 8-14 mm + 3 x 7-8 mm
SLCC172-3x0814+4x05	3 x 8-14 mm + 4 x 5 mm
SLCC172-3x0814+4x05	3 x 8-14 mm + 4 x 5 mm
SLCC172-3x0814+4x0710	3 x 8-14 mm + 4 x 7-10 mm
SLCC112-10	1 x 10 mm
SLCC112-1226	1 x 12-26 mm
SLCC132-1x1226+2x05	1 x 12-26 mm + 2 x 5 mm
SLCC132-1x1226+2x0710	1 x 12-26 mm + 2 x 7-10 mm
SLCC122-1226	2 x 12-26 mm
SLCC142-2x1226+2x05	2 x 12-26 mm + 2 x 5 mm
SLCC142-1x1226+2x05	2 x 12-26 mm + 2 x 5 mm
SLCC152-3x1226+2x05	2 x 12-26 mm + 2 x 5 mm
SLCC142-2x1226+2x0710	2 x 12-26 mm + 2 x 7-10 mm
SLCC182-2x1226+6x05	2 x 12-26 mm + 6 x 5 mm
SLCC172-3x1226+4x05	3 x 12-26 + 4 x 5 mm
SLCC132-1226	3 x 12-26 mm
SLCC172-3x1226+4x05	3 x 12-26 mm + 4 x 5 mm
SLCC172-3x1226+4x0710	3 x 12-26 mm + 4 x 7-10 mm
SLCC132-1x1432+2x0710	1 x 14-32 mm + 2 x 7-10 mm
SLCC142-2x1432+2x0710	2 x 14-32 mm + 2 x 7-10 mm
SLCC132-1432	3 x 14-32 mm
SLCC142-2x2232+2x0814	2 x 22-32 mm + 2 x 8-14 mm



Test and Cleaning Equipment

The Rosenberger test and cleaning equipment – specifically designed for site solutions applications



Product Overview

- Fiber loop
- Inspection and cleaning kits
- Test laser EV-3
- Reel cleaner
- Click cleaner

Fiber Loop

The Rosenberger Fiber Loop is designed for use in harsh environment.

This robust and handy loop adaptor supports measurement of single mode or multimode signals on site or within the lab. It supports LC Duplex, RDC male or female interfaces. The uni-directional loop adaptor helps to detect wrong fiber assignment and cross / uncross failures.



Loop Adaptor

Fiber Loop

Rosenberger No.			
Single mode G.657A - 9/125		*Multi mode OM 2 - 50/125	
98LCS120-L00	Loop-adaptor LCD-2F9μ	98LCS130-L00	Loop-adaptor LCD-2F50μ
98RDCK120-00	Loop-adaptor RDCK-2F9μ	98RDCK130-00	Loop-adaptor RDCK-2F50μ
98RDCS120-00	Loop-adaptor RDCS-2F9μ	98RDCS130-00	Loop-adaptor RDCS-2F50μ
98LCIS120-L00	LC unidirectional loop LCD-2F9μ		

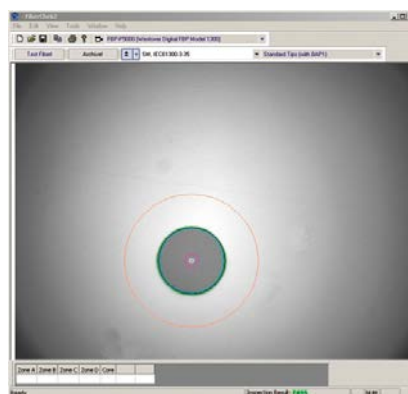
*OM 4 available on request

Inspection and Cleaning Kit

The kit includes all materials and tools for visual inspection and cleaning of FO connectors and adaptors. The main component is a video backpanel microscope. It is available with a hand-held monitor or with a USB interface, alternatively. The USB version needs a laptop or PC with USB 2.0 port.

That version comprises an additional feature compared to the monitor version: The pictures can be saved for documentation.

Microscope adaptors for Ø 1.25 mm and Ø 2.5 mm standard ferrules are included, additional adaptations to all frequently used connector types are available as accessory.



Inspection and Cleaning Kits

Rosenberger No.	Description
SLTK001-000	Cleaning kit with video-mic., light source and Insertion Loss measurement
98W018-000	Cleaning kit with USB microscope
SLTK001-000/53	Power source
SLTK001-000/51	Power meter for MM fibers
SLTK001-000/52	Power meter for SM fibers
SLTK001-000/57	Adaptor power meter Ø 1.25 mm

Test Laser EV-3

Laser light source for defect location, fiber identification and testing of connectors, single mode and multi mode.



Test Laser

Rosenberger No.	Description
SLTK001-000/50	Test laser EV-3 for ferrules with Ø 1.25 mm and Ø 2.5 mm

Reel Cleaner

Cleaning device with a dry textile ribbon for all FO connectors with the exception of MT-RJ male (with pins).

- One textile reel included
- Up to 400 cleanings per reel



Reel Cleaner

Rosenberger No.	Description
98W013-000	Reel cleaner
98W013-001	Replacement reel

Click Cleaner

Handy cleaning tool for ferrule endfaces of FO connectors.

- Simple release of the cleaning mechanism by pushing the tool holder
- Unmating of the connector not necessary – cleaning through the adaptor is available
- Extendable nozzle for cleaning connectors, being difficult accessible



Rosenberger No.	Description
98W005-000	Click cleaner, for ferrules Ø 1.25 mm
98W006-000	Click cleaner, for ferrules Ø 2.5 mm
98W007-000	Click cleaner, for RDC connectors
98W012-000	MTP®/MPO cleaner

Tools



Rosenberger No.	Description
SLT011-1.2/3	Torque screwdriver 1.2 -3 Nm
SLT011-4/8.8	Torque screwdriver 4-8.8 Nm
53W010-000	Torque wrench

Rosenberger No.

53W010-000	57	L98B-A0308-xxx	43	L98D-448-xxx	16
7F2RS105B-0M16T1	27, 47	L98B-A0338-xxx	33	L98D-449-xxx	16
7F2RS106B-0M16T1	27, 47	L98B-A0600-xxx	43	L98D-450-xxx	19
98GOF001-PSU	42	L98B-A0646-xxx	34, 38	L98D-451-xxx	19
98GOF002-PSU	42	L98B-A0647-xxx	34, 38	L98D-463-xxx	33
98GOF002-RX	42	L98B-A0652-xxx	21	L98D-471-xxx	15
98GOF002-TX	42	L98B-A0653-xxx	21	L98D-472-xxx	15
98GOF101-RX	42	L98B-A0654-xxx	21	L98D-479-xxx	15
98GOF102-RX	42	L98B-A0655-xxx	21	L98D-480-xxx	15
98K100-130-L02	46	L98B-A0656-xxx	21	L99-P005-xxx	40
98K100-130-L04	46	L98B-A0657-xxx	33	L99-P037-xxx	40
98LCIS120-L00	54	L98B-A0658-xxx	33	L99-P049-xxx	40
98LCS120-L00	54	L98B-A0676-xxx	21	L99-P055-xxx	40
98LCS130-L00	54	L98B-A0689-xxx	33	L99-P080-xxx	29
98RDCK120-00	54	L98B-A0709-xxx	38	L99-P084-xxx	29
98RDCK130-00	54	L98B-A0744-xxx	16	L99-P085-xxx	29
98RDCS120-00	54	L98B-A0745-xxx	19	L99-P113-xxx	30
98RDCS130-00	54	L98B-A0746-xxx	19	L99-P114-xxx	30
98W005-000	57	L98B-A0755-xxx	33	L99-P115-xxx	30
98W006-000	57	L98B-A0757-xxx	15	L99-P116-xxx	30
98W007-000	57	L98B-A0758-xxx	33	SD007-25-xxx	27
98W012-000	57	L98B-A0759-xxx	33	SL12C10FRNC-S-BK	26
98W013-000	56	L98B-A0783-xxx	19	SL12C16FRNC-S-BK	26
98W013-001	56	L98B-A0831-xxx	38	SL12C4FRNC-S-BK	26
98W018-000	55	L98B-A0859-xxx	34, 38	SL12C6FRNC-S-BK	26
98Z111-S04	34, 38	L98B-A0877-xxx	19	SL2C10MM2FRNC-S-BK-N	41
99C084-000N1	27, 47	L98B-A0878-xxx	34	SL2C10MM2FRNC-S-BK-R	41
GPSGlonass-36-N-GA	42	L98B-A0879-xxx	34	SL2C16MM2FRNC-S-BK-N	41
L98B-003-xxx	34, 38	L98B-A0880-xxx	34	SL2C16MM2FRNC-S-BK-R	41
L98B-003-xxx	38	L98B-A0883-XXX	38	SL2C25MM2FRNC-S-BK-N	41
L98B-004-xxx	38	L98B-A0900-xxx	22	SL2C25MM2FRNC-S-BK-R	41
L98B-022-xxx	15	L98B-A0909-xxx	19	SL2C35MM2FRNC-S-BK-N	41
L98B-069-xxx	15	L98B-A0915-xxx	22	SL2C35MM2FRNC-S-BK-R	41
L98B-091-XXX	38	L98B-A0916-xxx	22	SL2C4MM2FRNC-S-BK-N	41
L98B-128-xxx	16	L98B-A0933-xxx	38	SL2C4MM2FRNC-S-BK-R	41
L98B-201-xxx	32	L98B-A1015-xxx	34, 38	SL2C6MM2FRNC-S-BK-N	41
L98B-235-xxx	15	L98C-023-xxx	34, 38	SL2C6MM2FRNC-S-BK-R	41
L98B-237-xxx	32	L98C-026-xxx	38	SL2CxxMM2FRNC-S-BK-N	40
L98B-A0002-xxx	43	L98C-086-xxx	32	SL2CxxMM2FRNC-S-BK-R	40
L98B-A0005-xxx	43	L98C-117-xxx	43	SL3x10FRNC-S-BK	27
L98B-A0008-xxx	43	L98C-137-xxx	38	SL3x16FRNC-S-BK	27
L98B-A0011-xxx	43	L98D-028-3000	38	SL3x6FRNC-S-BK	27
L98B-A0070-xxx	43	L98D-181-xxx	34, 38	SL6C10FRNC-S-BK	26
L98B-A0085-xxx	43	L98D-182-xxx	34, 38	SL6C16FRNC-S-BK	26
L98B-A0140-xxx	43	L98D-218-xxx	43	SL6C4FRNC-S-BK	26
L98B-A0141-xxx	43	L98D-227-xxx	34, 38	SL6C6FRNC-S-BK	26
L98B-A0157-xxx	43	L98D-228-XXX	38	SL6x10FRNC-S-BK	27
L98B-A0195-xxx	34	L98D-229-xxx	43	SL6x16FRNC-S-BK	27
L98B-A0197-xxx	43	L98D-230-xxx	43	SL6x6FRNC-S-BK	27
L98B-A0272-xxx	43	L98D-231-xxx	43	SLCC111-03	50
L98B-A0295-xxx	43	L98D-232-xxx	43	SLCC111-08	50

SLCC112-0408	51	SLCC222-0408	51	SLPDU022-06-32	13
SLCC112-0814	51	SLCC241-03	50	SLPDU022-G6	13
SLCC112-10	51	SLCC241-08	50	SLPDU022-G6-32	13
SLCC112-1226	51	SLCC242-0408	51	SLPDU023-00	13
SLCC121-03	50	SLCC242-0710	51	SLPDU023-01	13
SLCC121-08	50	SLCC261-03	50	SLPDU025-18	13
SLCC122-0408	51	SLCC261-08	50	SLPDU046-03	13
SLCC122-0814	51	SLCC262-0408	51	SLPDU046-06	13
SLCC122-1226	51	SLCC282-0408	51	SLPDU046-06-C32	13
SLCC122-1x0814+1x08	51	SLFCS001-000	49	SLPDU048-20-B16	13
SLCC122-C03	51	SLFCS003-000	49	SLPDU052-00	13
SLCC122-C08	51	SLFCS009-000	49	SLPDU055-06	13
SLCC131-03	50	SLFCS011-000	49	SLPDU055-06-40	13
SLCC131-08	50	SLFDU004-06	13, 15	SLPDU055-06-C32	13
SLCC132-0408	51	SLFDU005-12	13, 15	SLPDU058-00	13
SLCC132-0814	51	SLFDU008-18	13, 15	SLPDU058-01	13
SLCC132-1226	51	SLFDU021-24	13, 15	SLPDU058-02	13
SLCC132-1432	51	SLFP0606-5.0-xxx	28	SLPDU058-03	13
SLCC132-1x0814+2x0408	51	SLFP0610-5.0-xxx	28	SLPDU059-00	13
SLCC132-1x0814+2x05	51	SLFP20306-5.0-xxx-R	28	SLPDU061-06-20	13
SLCC132-1x0814+2x0710	51	SLFP20310-5.0-xxx-R	28	SLPDU061-06-32	13
SLCC132-1x1226+2x05	51	SLFP20606-5.0-xxx-R	28	SLPDU062-00	13
SLCC132-1x1226+2x0710	51	SLFP20610-5.0-xxx-R	28	SLPDU063-03	13
SLCC132-1x1432+2x0710	51	SLHDU006-xxx	31	SLPDU063-03-06	13
SLCC132-C03	51	SLHDU048-06	13	SLPDU064-03	13
SLCC132-C08	51	SLHDU054-xx	31	SLT011-1.2/3	57
SLCC142-1x0814+2x05	51	SLHDU055-04	13	SLT011-4/8.8	57
SLCC142-1x1226+2x05	51	SLHDU055-06	13	SLTFMS001-06	23
SLCC142-2x0814+2x05	51	SLHDU055-08	13	SLTFMS004-06	23
SLCC142-2x0814+2x08	51	SLHDU055-xx	31	SLTFMS004-12	23
SLCC142-2x1226+2x05	51	SLHDU056-12-00	13	SLTFMS005-06	23
SLCC142-2x1226+2x0710	51	SLHDU056-12-2+4	13	SLTK001-000	55
SLCC142-2x1432+2x0710	51	SLHDU056-12-3+3	13	SLTK001-000/50	56
SLCC142-2x2232+2x0814	51	SLHDU056-xx-xx	31	SLTK001-000/51	55
SLCC152-3x1226+2x05	51	SLHDU057-xx	31	SLTK001-000/52	55
SLCC162-3x0814+3x08	51	SLODF001-xxx	48	SLTK001-000/53	55
SLCC172-3x0814+4x05	51	SLODF051-xxx	48	SLTK001-000/57	55
SLCC172-3x0814+4x0710	51	SLPDU005-03	13	SLTMPS004-03	30
SLCC172-3x1226+4x05	51	SLPDU005-06	13	SLTMPS004-06	30
SLCC172-3x1226+4x0710	51	SLPDU022-03-06	13	SLZ033-16F	47
SLCC182-2x1226+6x05	51	SLPDU022-03-20	13	SLZ033-16M	47
SLCC221-03	50	SLPDU022-03-32	13		
SLCC221-08	50	SLPDU022-06	13		



Website

For more information refer to our website:
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