Rosenberger

PreCONNECT® SMAP-G2 Smart Panel Generation 2 Ultra High Density (UHD) 19" panel system

PRODUCT INFORMATION

Rosenberger OSI offers with PreCONNECT® SMAP-G2 UHD a highly modular and plastic-reduced 19" Smart Panel SMAP panel system for data center data cabling.

With a port density up to 96 LC-Duplex or 48 MTP® per height unit a very high utilization of the front surface is achieved. A service-friendly assembly of the PFP's or the MTP® module cassettes is possible without tools by quick fasteners. Also the proven PreCONNECT® square-interface enables a toolless fixing of the trunk cables.

Depending on the type of use and assembly of the PreCONNECT® SMAP-G2 UHD panels, a multitude of easily exchangeable back planes are available for cable interception. The PreCONNECT® SMAP-G2 UHD panel is depth-adjustable by 19" mounting brackets and can therefore be individually adapted to different rack conditions.

Properties:

- Port density: 96 LC-Duplex or 48 MTP® per height unit HU
- Consists of 19" 1 HU empty panels, in two different width partitions, 6/6 and 4/4
- Empty panels are to be equipped with 1/2 HU part front plates PFPs and MTP® module cassettes in 1/6 and 1/4 width partitions
- PFPs and cassettes are toolless inserted from the front side and fixed with quick fasteners
- PFPs and cassettes can be pulled out to the front for maintenance
- Through its adjustable 19" mounting brackets the panel can be depth variable mounted
- Trunk cables can be routed into the panels through their back planes and either side
- At panels with trunk routing through their back planes, which are not fully equipped during their first installation, trunk cables can be retrofitted afterwards and removed for maintenance

Applications:

- Panel system for data center data cabling
- For all IT applications like Ethernet and Fibre Channel
- Appropriate for Spine-Leaf architectures, up to 16 trunks coming from Leaf Switches can be accommodated within a 1 HU SMAP-G2 UHD distribution panel next to the Spine-Switch

Your benefits at a glance:

- High modularity to configure individual cabling structures
- Fast and easy handling during first installation, retrofit and maintenance one-man installation possible
- Low complexity, focused on the functional needs
- Simple and low-cost migration to other applications, e.g. from duplex technology to MTP® based Parallel Optics
- Fiber and copper data cabling can be installed together within one panel
- Low fire load through minimized use of plastic

PreCONNECT® SMAP-G2 Ultra High Density (UHD) 19" panel system:

Is the Ultra High Density (UHD) variant of the generation 2 of our since years proved and tested, highly modular and plastics reduced 19" Smart Panel SMAP system for data center data cabling.

Port density: 96 LC-Duplex or 48 MTP® ports per height unit HU

PreCONNECT® SMAP-G2 UHD consists of 19" 1 HU empty panels, in two different width partitions, 6/6 and 4/4.

Empty panels are to be equipped with 1/2 HU part front plates PFPs and MTP® module cassettes in 1/6 and 1/4 width partitions (1).

The PFPs and module cassettes are toolless inserted from the front side and fixed with quick fasteners. By this design they can be pulled out to the front for maintenance.

The modular panel back planes (2) offering highest flexibility to configure cable entries application specific easy and cost-saving. See the configurations of the back planes in the descriptions of the empty panels.
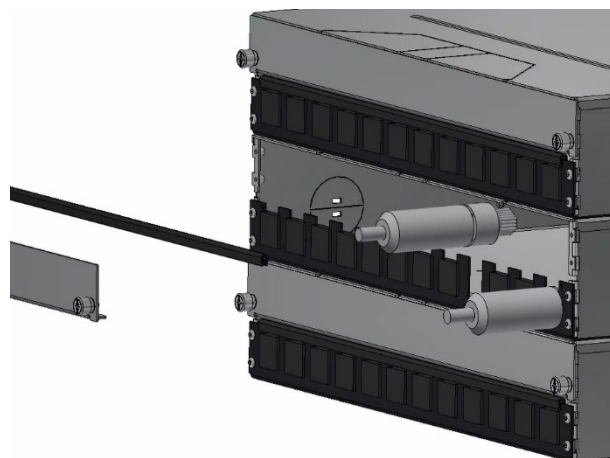
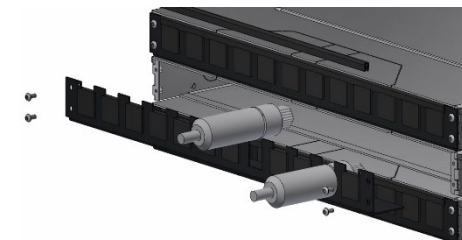Front granularity 6/6 width partition

1	3	5	7	9	11
2	4	6	8	10	12

Front granularity 4/4 width partition

1	3	5	7
2	4	6	8

Back plane blind covers at 2, 3 and 5 HU panels can be removed by their captive screws for comfortable trunk cable retrofit and maintenance.

The back plane of the 1 HU panel can be removed for retrofit and maintenance of trunk cables.

PreCONNECT® SMAP-G2 Ultra High Density (UHD) 19" panel system:

Material and color:

- Panel body: aluminum silver
- 19" mounting brackets and front: steel powder coated RAL9005 black

Weight:

One of the lowest weight panels of its kind: 1 HU empty distribution panel 1.6 kg

Dimensions:

- Width: 19"
- Height: 1 HU
- Depth: 200 mm and 300 mm deliverable. Through the captive screws of their back plane blind covers, the 2, 3 and 5 HU panels are 212 mm and 312 mm deep. We recommend 300 mm as shown here, because the space to accommodate trunk cable dividers and connector legs is enough, but uncomfortable narrow within 200 mm deep panels.

Part numbers:

PreCONNECT® SMAP-G2 UHD 19" 1 HU empty distribution panels, RAL9005 black, back plane with 16 PreCONNECT® square interfaces, as shown here. PreCONNECT® square interfaces dustproof covered with tool less removable blanks, here not shown.
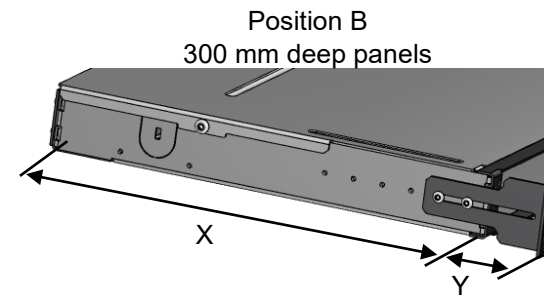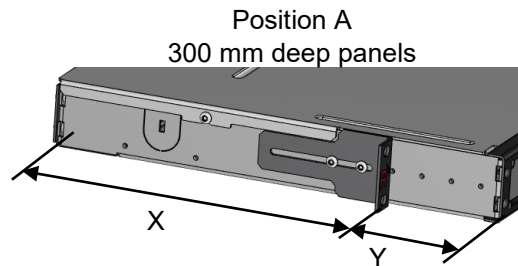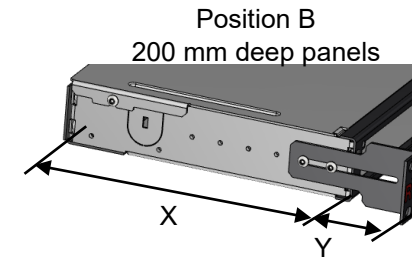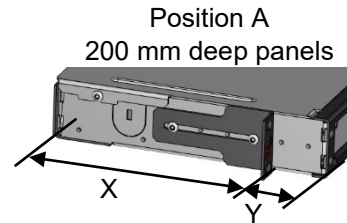
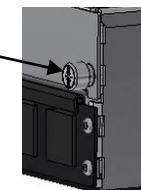|	
1 HU, 6/6 width partition, depth 300 mm	171H0012
1 HU, 4/4 width partition, depth 300 mm	171H0011

PreCONNECT® SMAP-G2 SD 19" panel system:

Through their adjustable 19" mounting brackets, the panels can be stepless mounted to
protrude to the front over the 19" level (Position A), or to stay recessed behind it (Position (B).

Position	panel depth	X [mm]	Y [mm]
A: protrusion to the front, over the 19" level	200 mm	160	40
	300 mm	225	75
B: recessed behind the 19" level	200 mm	155	45
	300 mm	255	45

Position A
200 mm deep panels

Position B
200 mm deep panels

Position A
300 mm deep panels

Position B
300 mm deep panels

*Through the captive screws of their back plane blind covers,
the 2, 3 and 5 HU panels are 212 mm and 312 mm deep. This
must be considered at position A in particular, because the
panels in these cases need X + 12 mm more depth space.*

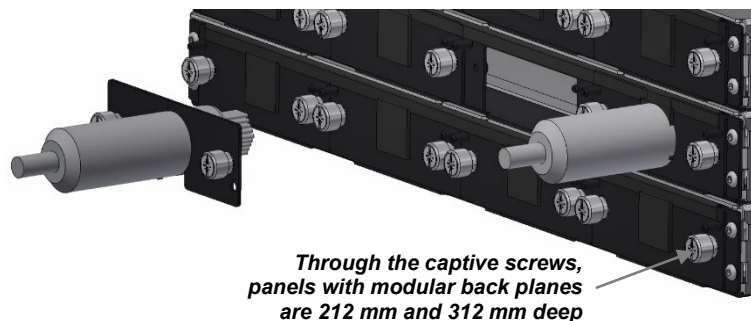## PreCONNECT® SMAP-G2 Ultra High Density (UHD) 19" panel system:

Part numbers:

SMAP-G2 UHD 19" empty distribution panels, RAL9005 black, with diverse back planes:

Configurations	6/6 width partition	4/4 width partition
1 HU, depth 300 mm, with modular back plane 2x3 170A1520	171H0029	171H0005
1 HU, depth 300 mm, with modular back plane 4x1 170A1521	171H0030	171H0006
See these back plane types separate in our product information SMAP-G2 SD.		

171H0029

171H0005

171H0030

171H0006

Comfortable trunk cable retrofit
and maintenance in 1 HU panels
Example: modular back plane 4x1 170A1521

Through the captive screws,
panels with modular back planes
are 212 mm and 312 mm deep

PreCONNECT® SMAP-G2 Ultra High Density (UHD) 19" panel system:

Part numbers:

SMAP-G2 UHD 19" empty distribution panels, RAL9005 black, with diverse back planes:

Configurations	6/6 width partition	4/4 width partition
1 HU, depth 300 mm, with blind back plane 170A1501 and two trunk cable divider holders 170A1523 to route one trunk cable each through either side of the panel	171H0031	171H0007

At 1, 2 and 3 HU panels, one trunk cable each can be routed into the panel at either side through to quarry out perforations (1) and can be fixed within internal trunk cable divider holders (2), which can be mounted within the panels.
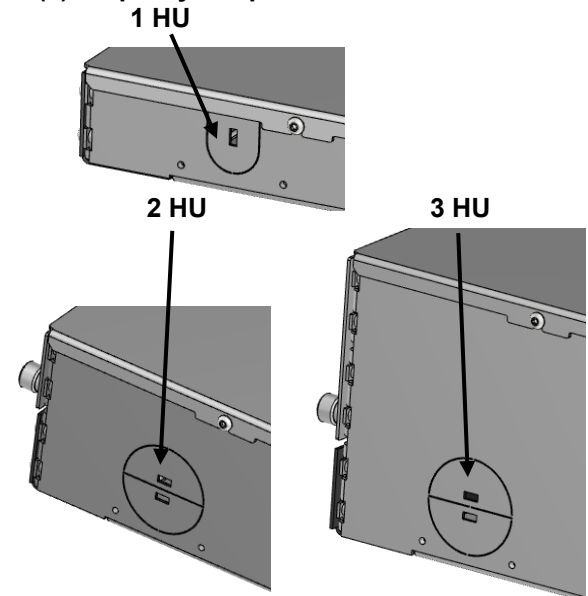*This trunk side entry can`t be applied at panels equipped with MTP® module cassettes.*

(1) to quarry out perforation 1 HU

2 HU

3 HU

171H0031

171H0007

(2) internal trunk cable divider holder for 1, 2 and 3 HU, can be ordered as accessorie part number: 170A1523
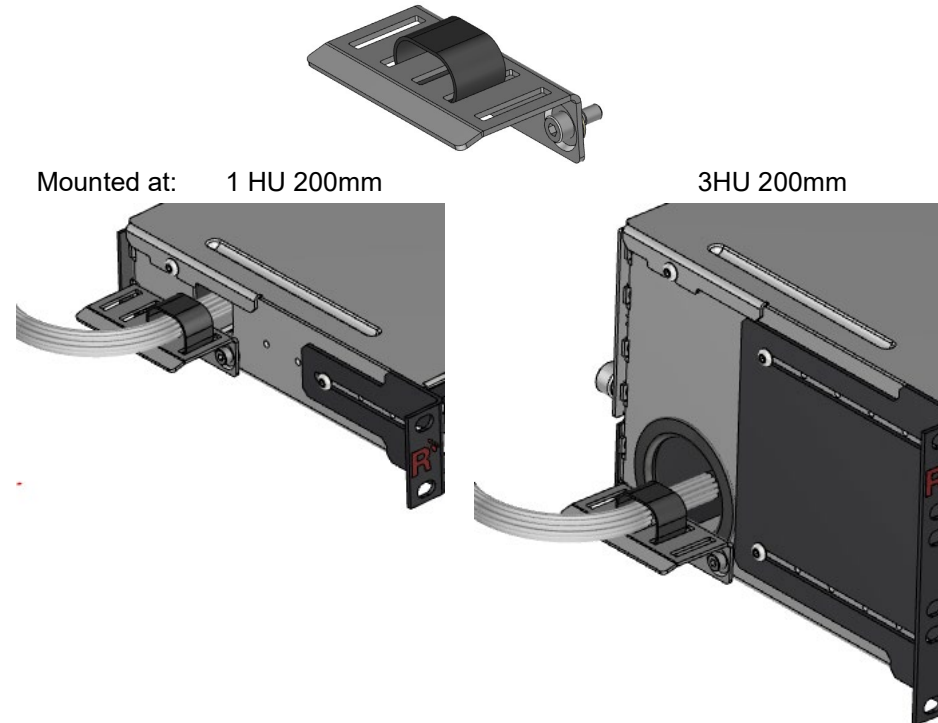
Mounted within 1 HU 200mm

PreCONNECT® SMAP-G2 UHD 19" panel system:

To rout patchcords through the side walls into the 1, 2 and 3 HU panels, the universal cable strain relief (1) is available.

(1) universal cable strain relief for 1, 2 and 3 HU
part number: 170A1526

Mounted at: 1 HU 200mm   3HU 200mm

SMAP-G2 UHD 1/2 HU 1/6 part front plates:

Fitting into SMAP-G2 UHD empty panels with 6/6 width partition. The PFPs are toolless inserted from the front side and fixed with quick fasteners. By this design they can be pulled out to the front for maintenance.

No numbering at part front plates PFP or adapters, because they are not readable at this UHD port density. Port addressing via port address field within optional patchcord manager possible, as shown behind in this document.

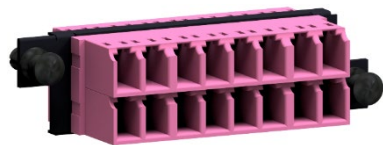Material and colour: steel powder coated RAL9005 black

1/2 HU 1/6 Blind PFP

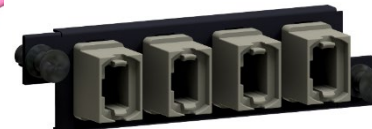| Part numbers RAL9005 black					
Number of adapter type/fibers	**for fiber type**				
	SM PC 0° blue	**SM APC 8° green**	**OM4 violet**	**MM grey for OCTO**	**MTP® 16 MM 8° APC white for SEDECIM**
Blind PFP	170H3002				
8 LC-Duplex (2 LC8) / 16F	170H6100	170H6101	170H6102OM4	---	
4 MTP®	---	type A "opposed key" 170H6103	---	type B "aligned key" 170H6104TB	type A "opposed key" 170H6105
With other adapter types on request.					

1/2 HU 1/6 PFP 8 LC-Duplex (2 LC8)

LCC-PPB

Using this PFP, trunks and patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied

1/2 HU 1/6 PFP 4 MTP®

MTP®

Using this PFP, trunks and patchcords with MTP® can be applied

SMAP-G2 UHD panels factory assembled, 300mm deep, with 1/2 HU 1/6 part front plates and back plane with 12 PreCONNECT® square interfaces:

Part numbers RAL9005 black					
HU	**Number of PFP and type**	**Number of LC-Duplex ports**	**SM PC 0° blue**	**OM4 violet**	
1	12 x 1/2 HU 1/6 8 LCD	96	171H5000	171H5001OM4	
HU	**Number of PFP and type**	**Number of MTP® ports**	**SM APC 8° green type A "opposed key"**	**MM grey type B "aligned key" for OCTO**	**MTP® 16 MM 8° APC white type A "opposed key" for SEDECIM**
1	12 x 1/2 HU 1/6 4 MTP®	48	171H5002	171H5003TB	171H5004
Other HU and configuration on request.					

SMAP-G2 UHD 1/2 HU 1/4 part front plates:

Fitting into SMAP-G2 UHD empty panels with 4/4 width partition. The PFPs are toolless inserted from the front side and fixed with quick fasteners. By this design they can be pulled out to the front for maintenance.

No numbering at part front plates PFP or adapters, because they are not readable at this UHD port density. Port addressing via port address field within optional patchcord manager possible, as shown behind in this document.

Material and colour: steel powder coated RAL9005 black

1/2 HU 1/4 PFP 12 LC-Duplex (6 LCQ)

Using this PFP, trunks and patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied

LCC-PPB

1/2 HU 1/4 PFP 12 MTP®

Using this PFP, trunks and patchcords with MTP® PRO must be applied

MTP® PRO

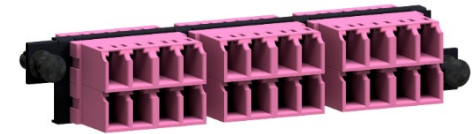| Part numbers RAL9005 black				
Number of adapter type/fibers	**for fiber type**			
	SM PC 0° blue	**SM APC 8° green**	**OM4 violet**	**MM grey**
Blind PFP	170H3001			
12 LC-Duplex (6 LCQ) / 24F	170H6000	170H6001	170H6002OM4	---
12 MTP®	---	type A "opposed key" 170H6006	---	type B "aligned key" 170H6005TB
With other adapter types on request.				

1/2 HU 1/4 Blind PFP

SMAP-G2 UHD panels factory assembled, 300mm deep, with 1/2 HU 1/4 part front plates and back plane with 12 PreCONNECT® square interfaces:

Part numbers RAL9005 black				
HU	**Number of PFP and type**	**Number of LC-Duplex ports**	**SM PC 0° blue**	**OM4 violet**
1	**8 x 1/2 HU 1/4 12 LCD**	96	171H4000	171H4001OM4
HU	**Number of PFP and type**	**Number of MTP® ports**	**SM APC 8° green type A "opposed key"**	**MM grey type B "aligned key"**
1	**8 x 1/2 HU 1/4 6 MTP®**	48	171H4002	171H4003TB
Other HU and configuration on request.				

SAMP-G2 UHD 16 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO and SEDECIM trunks:

Properties:

- For Port-Breakout of PreCONNECT® OCTO and SEDECIM trunks with MTP® connectors, as described in the product information PreCONNECT® OCTO and SEDECIM.
- Fitting in SMAP-G2 UHD panel with 6/6 width partition
- Height: 1/2 HU
- Width: 1/6
- Depth: 115 mm
- Polarity: Rx to Tx
- 2x MTP® female port 4+4F OCTO or 1x 16F SEDECIM at the rear side:
  - OCTO OM4: Elite quality, PC 0°, MTP® adapter type B „aligned key" grey
  - OCTO SM: Standard quality, APC 8°, MTP® adapter type A „opposed key" green
  - SEDECIM OM4: Elite quality, APC 8°, adapter type A „opposed key" white
  - SEDECIM SM: Elite quality, APC 8°, adapter type A „opposed key" green
- 8 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

MTP®

Trunks with MTP® can be applied here

LCC-PPB

Patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied here

Part numbers RAL9005 black				
Number and type of MTP® female ports at rear side	**Number of LC-Duplex ports at front side**	**OM4**	**SM LC-PC 0°**	**SM LC-APC 8°**
2 x 4+4F OCTO	2 OCTO groups of 4 = 8	170H4100OM4	170H4103	on request
1 x 16F SEDECIM	1 SEDECIM groups of 8 = 8	170H4101OM4	---	---

SMAP-G2 UHD panels factory assembled, 300mm deep, with 1/2 HU 1/6 MTP®-LC module cassettes and back plane with 12 PreCONNECT® square interfaces:
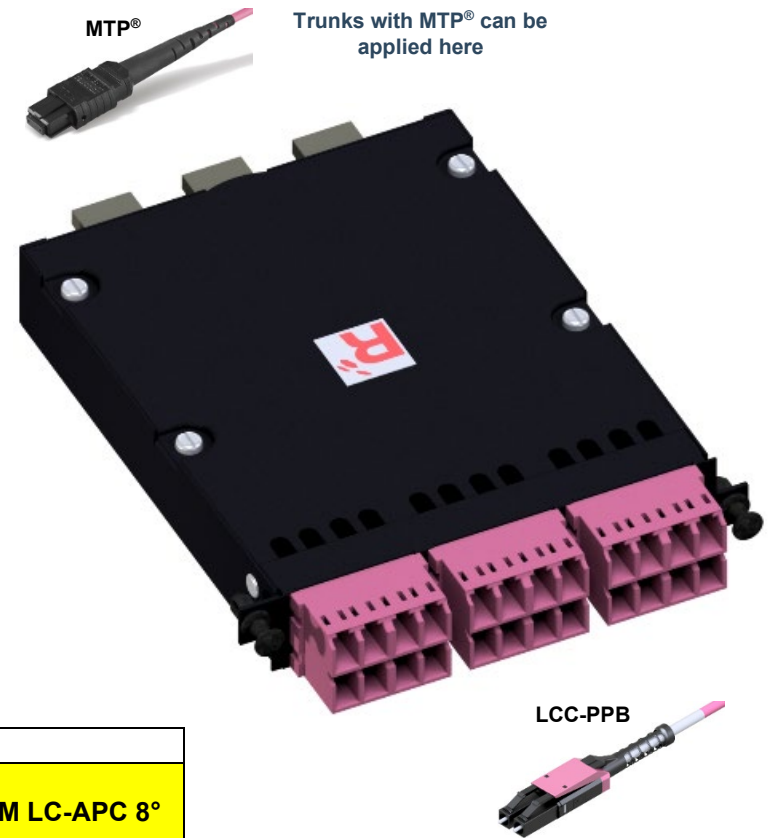
Part numbers RAL9005 black				
HU	**Number of cassettes and type**	**Number of LC-Duplex ports**	**OM4**	**SM LC-PC 0°**
1	12 x 1/2 HU 1/6 8 LCD / 2x 4+4F OCTO	96	171H5200OM4	171H5201
1	12 x 1/2 HU 1/6 8 LCD / 1x 16F SEDECIM	96	171H5202OM4	171H5203
Other HU and configuration on request.				

SAMP-G2 UHD 24 fiber MTP®-LC module cassettes fitting for PreCONNECT® OCTO and DUODECIM trunks:

MTP®

Trunks with MTP® can be applied here

Properties:

- For Port-Breakout of PreCONNECT® OCTO and DUODECIM trunks with MTP® connectors, as described in the product information PreCONNECT® OCTO and DUODECIM
- Fitting in SMAP-G2 UHD panel with 4/4 width partition
- Height: 1/2 HU
- Width: 1/4
- Depth: 115 mm
- Polarity: Rx to Tx
- 3x MTP® female port 4+4F OCTO or 2x 12F DUODECIM at the rear side:
  - OM4: Elite quality, MTP® adapter type B „aligned key" grey
  - SM: Standard quality, MTP® adapter type A „opposed key" green
- 12 LC-Duplex ports at the front side
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Material and colour cassette body and front: aluminum powder coated RAL9005 black

LCC-PPB

Patchcords with LC-COMPACT Push-Pull-Boot (LCC-PPB) and cable diameter 2.0mm or thinner must be applied here

Part numbers RAL9005 black				
Number and type of MTP® female ports at rear side	**Number of LC-Duplex ports at front side**	**OM4**	**SM LC-PC 0°**	**SM LC-APC 8°**
3 x 4+4F OCTO	3 OCTO groups of 4 = 12	170H4000OM4	170H4003	on request
2 x 12F DUODECIM	2 DUODECIM groups of 6 = 12	170H4001OM4	170H4004	on request

SMAP-G2 UHD panels factory assembled, 300mm deep, with 1/2 HU 1/4 MTP®-LC module cassettes and back plane with 12 PreCONNECT® square interfaces:

Part numbers RAL9005 black				
HU	**Number of cassettes and type**	**Number of LC-Duplex ports**	**OM4**	**SM LC-PC 0°**
1	8 x 1/2 HU 1/4 12 LCD / 2x 4+4F OCTO	96	171H4200OM4	171H4201
1	8 x 1/2 HU 1/4 12 LCD / 2x 12F DUODECIM	96	171H4202OM4	171H4203
Other HU and configuration on request.				

SAMP-G2 UHD 6 Port RJ45 Cat. 6_A module for 4/4 slot panel fitting for PreCONNECT® COPPER HIGH DENSITY trunks:
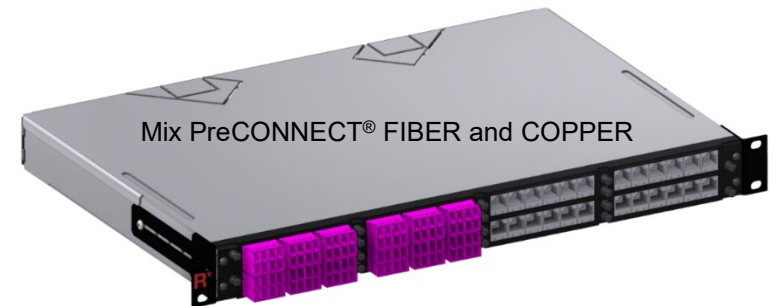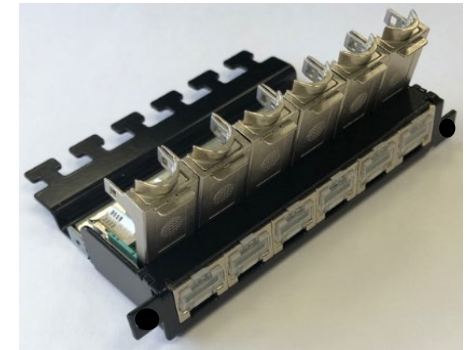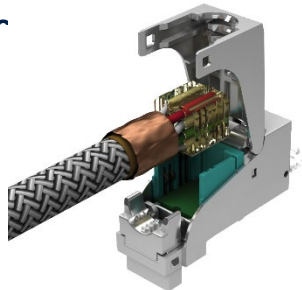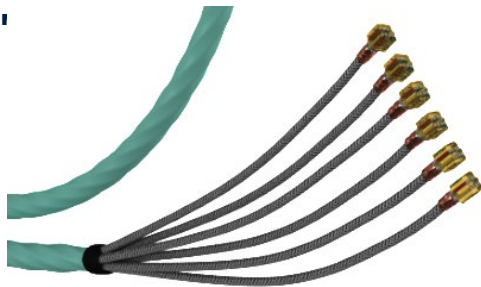
Properties:

- To carry PreCONNECT® COPPER HIGH DENSITY trunks assembled with module cubes, as described in the product information
PreCONNECT® COPPER HIGH DENSITY
- 6 port RJ45 Cat. 6_A
- Fitting in SMAP-G2 UHD panel with 4/4 width partition
- Height: 1/2 HU
- Width: 1/4
- Toolless placement of the module cassettes into the panel from the front side, fixing with quick fasteners
- Inclusive 2 m long grounding cable to connect the PFP, grounding cable is to be routed out of the panel through its back plane and attached at the grounding point of the rack
- Material and colour: steel powder coated RAL9005 black
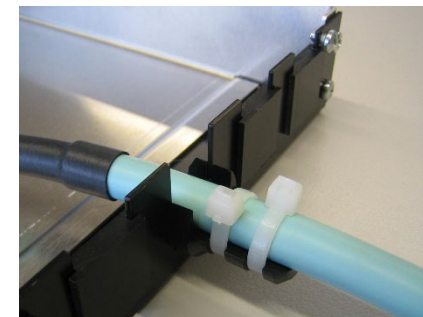
Part number RAL9005 black: 170H5000

PreCONNECT® COPPER HIGH DENSITY trunk

Mix PreCONNECT® FIBER and COPPER

Fixing of PreCONNECT® COPPER trunks at panel back plane using PreCONNECT® universal cable fixture. For cable diameters 6 to 18 mm.
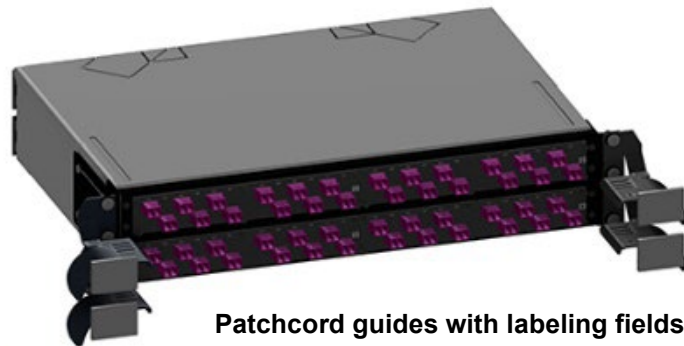
Part number set incl. two cable ties: 111A0650

For 19" panel accessories see our product information 19" panel accessories:

Labeling fields

Patchcord guides with labeling fields

For other panel back planes see our product information SMAP-G2 SD:

Patchcord manager

- height units saving (0 HU) mountable in front of 19" panels
- with foldaway front cover
- with optional labelling and port address fields

About Rosenberger OSI:

Since 1991, Rosenberger Optical Solutions & Infrastructure (Rosenberger OSI) has been a recognized expert for fiber-based connectivity, cabling solutions and infrastructure services in the areas of data centers, local area networks, mobile networks and industrial applications. As an integrated solution provider, we have high expertise in the development and operational excellence in the production of system solutions for communication networks. Our comprehensive services enable the secure and efficient operation of digital infrastructures. This combination, combined with our strong customer focus, makes us unique and a strong partner in the global market.

Rosenberger OSI has been part of the globally operating Rosenberger Group since 1998. The Rosenberger Group is a leading global provider of high-frequency, high-voltage and fiber optic connectivity solutions with headquarters in Germany. For further information, please visit:
www.rosenberger.com/osi

Rosenberger

Rosenberger-OSI GmbH & Co. OHG

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Creation date: 2019-09-17
Valid since: 2022-04-08
Revision: 006