# Rosenberger

### PreCONNECT® BREAKOUT



#### PreCONNECT® BREAKOUT solution is available in two end face quality features: BASIC and PURE

Define the end-face quality according to your application requirements:



**Quality feature BASIC** is our well-proven, high-grade, standards compliant product in terms of end-face geometry, defect, and cleanness, providing excellent IL and RL performance:

- The PreCONNECT® factory-assembled plug & play system enables quick and reliable, cost efficient, installation and performance
- Harmonized modular components of the quality feature BASIC solution ensure end to end performance of the entire channel



**Quality feature PURE** is the enhanced version of our quality feature BASIC, but with more stringent defect and cleanliness screening and factory sealed, tamper evident adapter-interfaces.

- Guaranteed protection of the polished connector end-face against contamination and damage through sealed adapter-interfaces, enabling time savings during initial installation and commissioning due to the elimination of the need for cleaning and testing\*/\*\*.
- Quality feature PURE provides an industry leading low <u>random mate</u> insertion and return loss (mean) which enables up to six (6) mated pairs in a 10G/OM4 application up to 300m.

#### Part numbers:

Quality feature BASIC: The part numbers XXXAXXXX listed in this document are valid for the BASIC quality feature.

Quality feature PURE: Add a "P" to the end of the quality feature BASIC part number (Example: XXXAXXXXP)

(Note: PURE trunk cables have factory attached sealed coupling adapters incorporated and thus utilize empty patch panels and enclosures)

<sup>\*</sup> While Rosenberger does not require permanent link or channel testing for warranty registration of PURE installations due to guaranteed performance, certain customers will require testing documentation for their records.

<sup>\*\*</sup> Only applicable when all components are of quality feature PURE and installed by trained PURE installers.

#### Applications:

Cabling of data centers and their IT rooms, data center containers and EDGE computing sites

#### System consists of:

- Factory assembled FO breakout cables, FRNC-LSZH indoor cables, up to 32 fibers
- With connector systems LC, MDC, SC and E2000™
- Three 19" panel systems selectable: Conventional distribution panels, SMAP-G2 SD, SMAP-G2 HD and SMAP-G2 UHD
- Suitable Patchcords
- Useful accessories
- Patch Location Rack





#### Features:

- For few numbers of fibers and short lengths:
  - Trunks up to 32 fibers
  - Practical lengths: Cost comparison by break-even calculation versus PreCONNECT® STANDARD
- Migration to MPO based parallel optics applications possible by using Migration-Harnesses

#### Your benefits at a glance:

- Most cost-effective solution for Trunks up to 32 fibers and short lengths
- Fast and safe installation trough factory assembled Plug & Play systematic
- Highest quality and cost-efficiency through factory assembling
- PreCONNECT® cabling systems consist of perfectly harmonized modular single components

PreCONNECT®
BREAKOUT trunk



modular 19" panel systems

**SMAP-G2 SD** 







**SMAP-G2 HD and UHD** 



conventional 19" 1 and 2 HU
distribution panels
fixed installation and telescopic
complete pullout



patch location rack



#### patchcords



#### accessories



#### **Applications:**

Cabling of data centers and their IT rooms, data center containers and EDGE computing sites.

- Universal to use FO cabling system up to 32 fibers per Trunk
- Cost and attenuation optimized
- Focused on the useful and necessary

#### System description:

Our PreCONNECT® BREAKOUT cabling system consists of:

- PreCONNECT® BREAKOUT Trunk called factory assembled FO breakout cables, can be ordered with application specific "variable" long connector legs
- therefore explicitly developed 19" Panel systems
- a large variety of Patchcords and accessories
- and Patch Location Racks

We consider Breakout-Trunks as an alternative product on short lengths and up to 32 fibers to our well established loose-tube cables based Trunks. Breakout-Trunks do not need cable dividers, since the connectors are directly assembled at the robust sub-elements of the breakout cables.

The "Break-Even-Length" of Breakout-Trunks versus loose-tube cables based Trunks depends on the type. The cost reduction of the not needed cable dividers is equalized by the higher per meter price of Breakout-Trunks at certain lengths.

#### **Properties:**

PreCONNECT® square-interfaces on both sides which can be tool-less hooked into PreCONNECT® 19" Panels for tensile and torsion resistant fixing of the PreCONNECT® BREAKOUT Trunks.

Connector legs on both sides can be ordered application specific "variable" all the same length, from 20cm to max. 5m, or as our "standard stepped" fitting to our PreCONNECT® 19" Panels

Mixed configurations, ex. side A "standard stepped" and side B "variable" are possible too.

**Polarity:** The connector legs are alpha numerical uniquely coded. The standard polarity is "channelwise crossed" (pairwise flipped) for full-duplex transmission systems – A1 to B1, A2 to B2, etc. On request "uncrossed" deliverable.

**Length definition:** Order-length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square-interfaces.

**Delivery form:** Dependent on the length as cable ring or on cardboard or wooden drum, 100% IL factory measured with measurement protocol, product label with serial number on both sides.



#### **Properties:**

#### **Breakout cable types:**

PreCONNECT® BREAKOUT Trunks are deliverable with all breakout cables up to 32 fibers, mostly used:

■ Indoor cable I-V(ZN)HH, CPR class Dca, Cca and B2ca

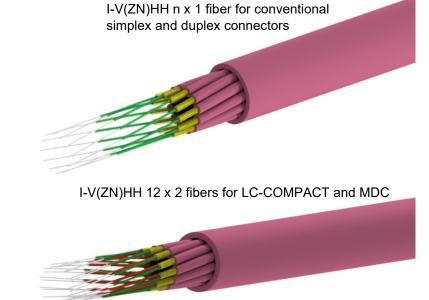
Cable data, see separate cable data sheets.

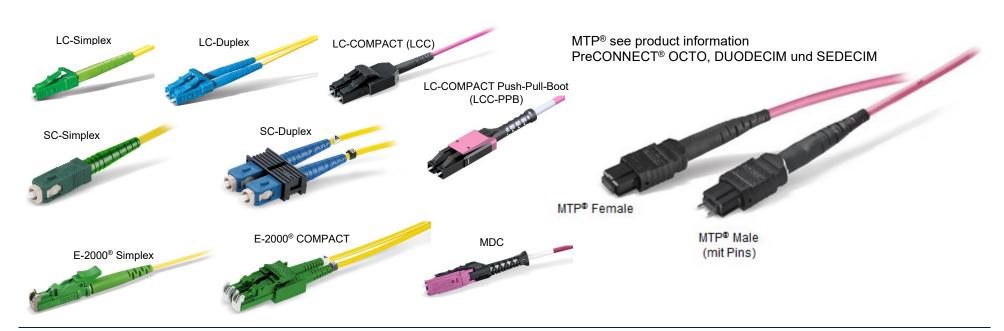
#### Fiber types:

With all common fiber types deliverable. Bend-insensitive fibers by default. Fiber data, see separate fiber data sheets.

#### **Connector types:**

With all common connector types deliverable. Connector data, see separate connector data sheets.





#### **Properties:**

#### Installation protection:

The package of application specific "variable" legs is a not pull resistant dust-proof foil tube.

On "standard stepped" legs you can select:

dust-proof foil tube



and 150 N tensile-strength, crush and kink resistant, IP50 dust-proof indoor-installation-tube



Author: Harald Jungbäck



Standard stepped "A" leg lengths and installation tube diameters
of PreCONNECT® BREAKOUT trunks, all types of connectors except SC-Duplex 2)
Steps channel/fiber 1 to n: 1 = long, n = short

	•						
Number of channels/fibers	4/8	6/12	8/16	12/24	16/32		
"A" leg lenths stepped from to [cm] 1)	45 to 75	45 to 75	45 to 73	45 to 89	45 to 70		
Outer diameter installation tube	30	30	30	30	30		
IP50 Indoor [mm]	30	30	30	30	30		
4) = 1							

<sup>1)</sup> Production tolerance – 5 cm / 2) Installation tube diameter of trunks with SC-Duplex on request

#### **Properties:**

#### Length definition:

- Order-length = length between the connectors of the longest legs at both sides, not between the PreCONNECT® square-interfaces.
- Possible order-lengths: From 5 to 2000 meter

#### Length tolerances:

Trunk length	Tolerance
<= 10m	+/- 50cm
> 10m <= 30m	+/- 100cm
> 30m <= 100m	+/- 150cm
> 100m	+/- 2%

Operating temperature range:-10°C to +60°C

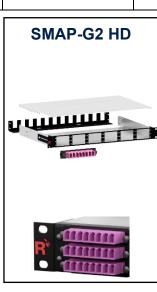
#### **Delivery form:**

- Dependent on the length as cable ring or on cardboard or wooden drum
- Insertion loss and return loss measured acc. to IEC 61300-3-4, method B, MM 850/1300nm and SM 1310/1550nm, with measurement protocol
- Product label with serial number at both sides

# Application of PreCONNECT® BREAKOUT Trunks and Patchcords with LC-COMPACT (LCC) and LC-COMPACT Push-Pull-Boot (LCC-PPB) in our 19" panel systems and Trunk leg lengths:

19" panel systems	LC-Duplex port density per HU	Trunks with LCC	Trunks with LCC-PPB	Patchcords with LCC	Patchcords with LCC-PPB	Trunk leg lengths	
SMAP-G2 SD	48	<b>~</b>	×	<b>&gt;</b>	×		
SMAP-G2 HD	72	<b>~</b>	recommended	×	✓ required	standard stepped "A length legs"	
SMAP-G2 UHD	96	×	✓ required	×	required	A length legs	
Conventional	24	<b>~</b>	×	<b>~</b>	×	standard stepped "A length legs	
ODF LARO	144 in 5 ETSI HU	<b>~</b>	recommended	×	✓ required	extended stepped "E length legs"	









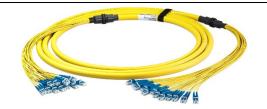


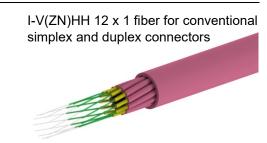






PreCONNECT® BREAKOUT trunks with indoor cables I-V(ZN)HH CPR class Dca and Cca:





Number of channels/fibers	Cable type	CPR class	Connectors on both sides	length	SM PC 0°	SM APC 8°	OM4
			LC-Simplex	variable	on request	on request	on request
			LC-Duplex	variable	036A9034G657A1	on request	036A0457OM4
4	1 \ //7\\\	Dec 1)	SC-Simplex	variable	036A0526G657A1	on request	on request
4	I-V(ZN)HH 4 x 1 fiber	Dca 1)	SC-Duplex	variable	on request	on request	on request
			E-2000® Simplex	variable	on request	on request	on request
			E-2000® COMPACT	variable	on request	on request	on request
		Dca <sup>1)</sup>	LC-Simplex	variable	on request	on request	on request
			LC-Duplex	variable	036A0508G657A1	on request	on request
40	12 I-V(ZN)HH 12 x 1 fiber		SC-Simplex	variable	on request	on request	036A0527OM4
12			SC-Duplex	variable	on request	on request	on request
			E-2000® Simplex	variable	on request	036A0541G657A1	on request
		E-2000® COMPACT	variable	on request	on request	on request	
			LC-Simplex	variable	036A0521G657A1	on request	on request
			LC-Duplex	variable	036A0435G657A1	on request	on request
24	1 \ //7N\\       0.4 \ \ 4 \ f!	Dec 1)	SC-Simplex	variable	on request	on request	on request
24	I-V(ZN)HH 24 x 1 fiber	Dca 1)	SC-Duplex	variable	on request	on request	on request
			E-2000® Simplex	variable	on request	036A0520G657A1	on request
			E-2000® COMPACT	variable	on request	on request	on request

<sup>1)</sup> Cca auf Anfrage

Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.



PreCONNECT® BREAKOUT trunks with indoor cables I-V(ZN)HH CPR class Dca and B2ca:





Number of channels/fibers	Cable type	CPR class	Connectors on both sides	length	SM PC 0°	SM APC 8°	OM4
			LC-COMPACT	variable	036A0532G657A1	036A0524G657A	036A0510OM4
4/8	I-V(ZN)HH 4 x 2 fiber	Dca <sup>2)</sup>	LC-COMPACT PPB	variable	036A0545G657A1	on request	036A0546OM4
			MDC	variable	on request	on request	on request
			LC-COMPACT	variable	036A0503G657A	on request	036A0503OM4
6/12	I-V(ZN)HH 6 x 2 fiber	Dca <sup>2)</sup>	LC-COMPACT PPB	variable	on request	on request	on request
			MDC	variable	on request	on request	on request
	/16 I-V(ZN)HH 8 x 2 fiber		LC-COMPACT	variable	036A0547G657A1	on request	036A0517OM4
8/16		Dca <sup>2)</sup>	LC-COMPACT PPB	variable	036A0548G657A1	on request	036A0549OM4
			MDC	variable	on request	on request	on request
			LC-COMPACT	variable	036A0509G657A1	036A0543G657A1	036A0504OM4
12/24	I-V(ZN)HH 12 x 2 fiber	Dca <sup>2)</sup>	LC-COMPACT PPB	variable	on request	on request	on request
			MDC	variable	on request	on request	036A0544OM4
			LC-COMPACT	variable	on request	on request	036A0550OM4
16/32	I-V(ZN)HH 16 x 2 fiber	Bca	LC-COMPACT PPB	variable	on request	on request	on request
			MDC	variable	on request	on request	on request

<sup>2)</sup> Change to B2ca once Dca inventory is used up

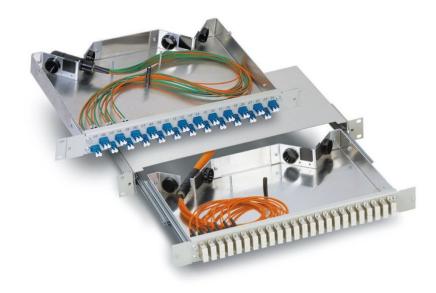
Technical data of connectors, fibers and cables on request via the product profile of your selected trunks.

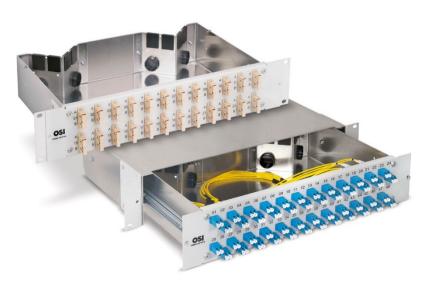
#### 19" 1 and 2 HU Distribution Panels:

#### **Properties:**

- Basic panel with optimized functionality
- Suitable for the connection of all cables assembled by Rosenberger OSI
- Available in the following two variants:
  - Fixed installation
  - Telescopic complete pullout: fully retractable
- Torsion and strain-resistant cable support for:
- 2 PreCONNECT® Trunk cable dividers for 1 HU
- 4 PreCONNECT® Trunk cable dividers for 2 HU
- 2 PG 21 (29 mm) cable inputs
- Oblique 45°cable guide to rear, guide direction selectable
- 2 universal supports can be mounted for simplex, duplex and breakout cables, see Accessories
- Screen-printed front labeling: numerical and alphanumerical
- Material and color:
  - Body: aluminium, natural
  - Front: powder-coated aluminum, RAL 7035 (light gray)
- Depth: 250 mm

These panels are not appropriate for PURE trunks.





# **PreCONNECT® 19" 1 and 2 HU conventional distribution panels:**





#### Part numbers 1 HU RAL 7035 (light gray)

Number		Fixed in	stallation	Telescopic complete pullout		
of chan- nels / fibers	Adapter type	SM	OM4	SM	OM4	
	LC-Duplex PC 0°	231A0173	231A1293OM4	230A0173	230A1293OM4	
6/12	SC-Duplex plastic PC 0°	231A0420	231A0440OM4	230A0420	230A0440OM4	
0/12	SC-Duplex metal	231A0153	231A0013	230A0153	230A0013	
	E-2000® HRL Simplex APC 8°	231A1003		230A1003		
	LC-Duplex PC 0°	231A0175	231A1295OM4	230A0175	230A1295OM4	
12/24	SC-Duplex plastic PC 0°	231A0421	231A0441OM4	230A0421	230A0441OM4	
12/24	SC-Duplex metal	231A0155	231A0015	230A0155	230A0015	
	E-2000® HRL Simplex APC 8°	231A1005		230A1005		
	LC-Duplex PC 0°	231A0177	231A1298OM4	230A0177	230A1298OM4	
24/48	SC-Duplex plastic PC 0°	231A0422	231A0442OM4	230A0422	230A0442OM4	
	SC-Duplex metal	231A0158	231A0018	230A0158	230A0018	

#### Part numbers 2 HU RAL 7035 (light gray)

	( 0 0 37				
	LC-Duplex PC 0°	235A1287	235A1317OM4	234A1287	234A1317OM4
24/49	SC-Duplex plastic PC 0°	235A0180	235A0400OM4	234A0180	234A0400OM4
24/48	SC-Duplex metal	235A0157	235A0017	234A0157	234A0017
	E-2000® HRL Simplex APC 8°	235A1007		234A1007	-
	LC-Duplex PC 0°	235A1289	235A1319OM4	234A1289	234A1319OM4
48/96	SC-Duplex plastic PC 0°	235A0181	235A0401OM4	234A0181	234A0401OM4
	SC-Duplex metal	235A0168	235A0018	234A0168	234A0019

With other adapter types and numbers of fibers on request.



### **PreCONNECT® 19" 1 and 2 HU conventional distribution panels accessories:**

Part numbers accessories 1 HU			
Tertiary cable support standard	1 pcs.	111A0403	
Tertiary cable support large with brush	1 pcs.	111A0418	
Support for 4 PreCONNECT® trunks	1 set = 2 plates	111A0416	
Support (straight) for 6 PreCONNECT® trunks	1 set = 2 plates	111A0425	
1 HU labeling field 30 x 35 mm	1 pcs.	111A0415	01 02 03 0
Part numbers accessories 2 HU			
Tertiary cable support standard	1 pcs.	111A0403	
Tertiary cable support large with brush	1 pcs.	111A0611	Will Street
Support for 8 PreCONNECT® trunks	1 set = 4 plates	111A0612	
Support (straight) for 12 PreCONNECT® trunks	1 set = 4 plates	111A0613	
2 HU labeling field 30 x 88 mm	1 pcs.	111A0610	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

#### PreCONNECT® SMAP-G2 Standard Density (SD) 19" panel system:

#### Port density:

LC-Duplex: 48 ports per HU at the 1, 2 and 3 HU panels, 57.6 per HU (total 288) at 5 HU

MDC: 128 ports per HU at the 1, 2 and 3 HU panels, 153.6 per HU (total 768) at 5 HU

#### **Dimensions:**

■ Width: 19"

■ Height: 1, 2, 3 and 5 HU

MEGA HIGH DENSITY (MHD) with MDC ■ Depth: 200 mm and 300 mm, see product information SMAP-G2 SD

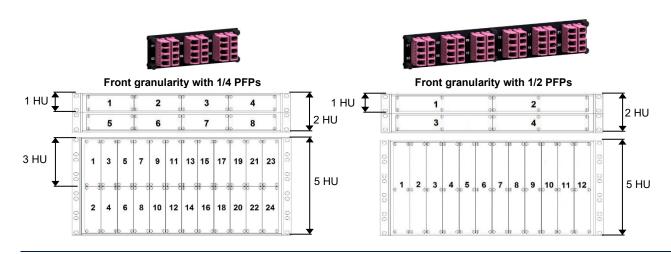
#### Part numbers:

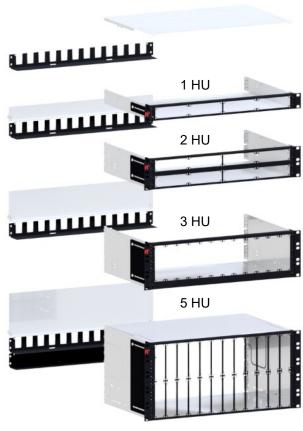
SMAP-G2 SD empty distribution panels, RAL9005 black, back plane with 12 PreCONNECT® square interfaces:

1 HU, depth 300 mm	171A0001
1 HU, depth 200 mm	171A0020
2 HU, depth 300 mm	172A0001
3 HU, depth 300 mm	173A0001
5 HU, depth 300 mm	175A0001

Find panels with other back plane configurations and further information in our product information SMAP-G2 SD.

SMAP-G2 SD panels for PURE trunks are described behind in this document.





#### SMAP-G2 SD 1 HU 1/4 part front plates with matrix numbering:

Part numbers RAL9005 black							
Number of		for fiber t	уре				
Number of adapter type/fibers	SM PC 0°	SM APC 8°	OM4				
adapter type/fibers	blue	green	violet				
Blind PFP	170A0001						
6 LC-Duplex / 12F	170A0110	170A0120	170A0130OM4				
12 LC-Duplex (6 LCQ) / 24F	170A0210	170A0220	170A0230OM4				
6 SC-Duplex / 12F	170A0410	170A0420	170A0430OM4				
6 E-2000®-Compact / 12F	170A0510	170A0520					
Find part numbers for panels	Find part numbers for papels factory assembled with part front plates in						

Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 SD.



#### 1 HU 1/4 PFP 6 LC-Duplex



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



1 HU 1/4 PFP 6 SC-Duplex



1 HU 1/4 PFP 6 E-2000®-Compact



#### SMAP-G2 SD 1 HU 1/4 part front plates with labelling field:

Part numbers RAL9005 black					
Number of		for fiber	type		
adapter type/fibers	SM PC 0°	SM APC 8°	OM4		
adapter type/fibers	blue	green	violet		
6 LC-Duplex / 12F	170A3110	170A3120	170A3130OM4		
12 LC-Duplex (6 LCQ) / 24F	170A3210	170A3220	170A3230OM4		
6 E-2000®-Compact / 12F   170A0510   170A0520					
Find part numbers for panels factory assembled with part front plates in					
our product information SMA	P-G2 SD.				

1 HU 1/4 PFP 6 LC-Duplex



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



1 HU 1/4 PFP 6 E-2000®-Compact

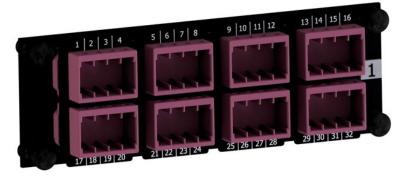


### SMAP-G2 SD 1 HU 1/4 part front plates with matrix numbering:

Part numbers RAL9005 black						
Number of	for fiber type					
Number of	SM PC 0°	SM APC 8°	OM4			
adapter type/fibers	blue	green	violet			
8 MDC4 / 64F numbering readable at horizontal mounting	170A0005	on request	170A0006OM4			
8 MDC4 / 64F numbering readable at vertical mounting	170A0009	on request	170A0010OM4			

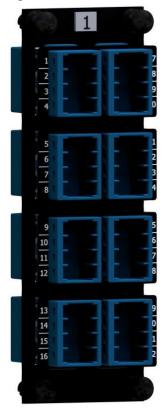
Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 SD.

1 HU 1/4 PFP 8 MDC4 numbering readable at horizontal mounting





1 HU 1/4 PFP 8 MDC4 numbering readable at vertical mounting



#### SMAP-G2 SD 1 HU 1/2 part front plates with matrix numbering:

Part numbers RAL9005 black					
Number of		for fiber type			
adapter type/fibers	SM PC 0°	SM APC 8°	OM4		
adapter type/fibers	blue	green	violet		
Blind PFP		2			
12 LC-Duplex / 24F	170A0150	170A0160	170A0170OM4		
24 LC-Duplex (12 LCQ) / 48F	170A0250	170A0260	170A0270OM4		
12 SC-Duplex / 24F	170A0450	170A0460	170A0470OM4		
12 E-2000®-Compact / 24F	170A0550	170A0560			
Find part numbers for panels factory assembled with part front plates					



#### 1 HU 1/2 PFP 12 LC-Duplex

our product information SMAP-G2 SD.



#### 1 HU 1/2 PFP 24 LC-Duplex (12 LCQ)



#### 1 HU 1/2 PFP 12 SC-Duplex



#### 1 HU 1/2 PFP 12 E-2000®-Compact



#### SMAP-G2 SD 24 fibers trunk module:

#### **Properties:**

- To accommodate two 12 fiber or one 24 fiber PreCONNECT® STANDARD trunks with standard stepped "A leg lengths", as described in the product information PreCONNECT® STANDARD
- Height: 1 HUWidth: 1/4
- Depth: 201 mm, fits in 300 mm deep panels only
- Toolless placement of the trunk module into the panel from the front side, fixing with quick fasteners
- Material and colour:
  - Cassette body: aluminum powder coated RAL9005 black
  - Front: steel powder coated RAL9005 black

Part numbers RAL9005 black					
Number of LC-Duplex ports at front side	OM4	SM LC-PC 0°	SM LC-APC 8°		
12	170A2052OM4	170A2050	170A2051		

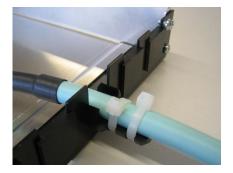


Part number set incl. two cable ties: 111A0650









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

Port density:

■ 72 LC-Duplex ports per HU

**Dimensions:** 

■ Width: 19"

■ Height: 1 HU and 2 HU

■ Depth: 200 mm and 300 mm, see product information SMAP-G2 HD

Part numbers:

SMAP-G2 HD empty distribution panels, RAL9005 black, back plane with 12 PreCONNECT® square interfaces:

1 HU, 6/6 width partition, depth 300 mm	171H0013
1 HU, 4/4 width partition, depth 300 mm	171H0010
1 HU, 4/4 width partition, depth 200 mm	171H0001
1 HU, 3/3 width partition, depth 300 mm	171H0015
2 HU, 4/4 width partition, depth 300 mm	172H0002
2 HU, 4/4 width partition, depth 200 mm	172H0001

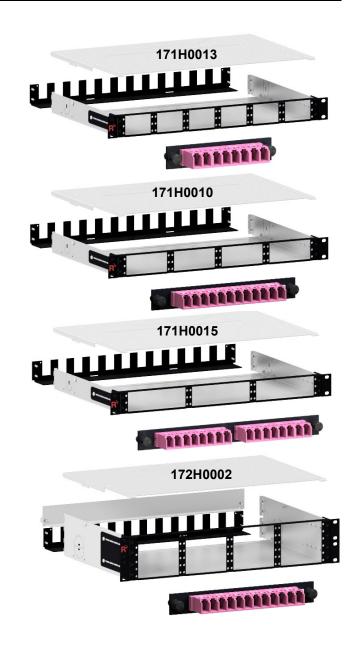
Find panels with other back plane configurations and further information in our product information SMAP-G2 HD.

SMAP-G2 HD panels are not appropriate for PURE trunks.

We recommend to apply trunks with LC-COMPACT Push-Pull-Boot (LCC-PPB) in this panel system.

LC-COMPACT Push-Pull-Boot (LCC-PPB) patchcords with cable diameter 2.0 mm or thinner must be used with this panel system, to be found behind in this product information.





#### **SMAP-G2 HD part front plates:**

Part numbers RAL9005 black							
		for fiber type					
PFP Typ	Number of PFP and type	SM PC 0°	SM APC 8°	OM4			
		blue	green	violet			
1/3 HU 1/6	Blind PFP		170H00	02			
1/3 HU 1/6	4 LC-Duplex (1 LC8) / 8F	170H2100	170H2101	170H2102OM4			
1/3 HU 1/4	Blind PFP	170H0001					
1/3 HU 1/4	6 LC-Duplex (1 LC12) / 12F	170H2000	170H2001	170H2002OM4			
1/3 HU 1/3	Blind PFP		170H00	03			
1/3 HU 1/3	8 LC-Duplex (2 LC8) / 16F	170H2202	170H2203	170H2002OM4			
Find part numbers for panels factory assembled with part front plates in our product							
information SMAP-G2 HD.							

1HU front granularity 6/6 width partition

1	4	7	10	13	16
2	5	8	11	14	17
3	6	9	12	15	18

1HU front granularity 4/4 width partition

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

1HU front granularity 3/3 width partition

1	4	7
2	5	8
3	6	9

1/3 HU 1/6 PFP 4 LC-Duplex (1 LC8)



1/3 HU 1/4 PFP 6 LC-Duplex (1 LC12)



1/3 HU 1/3 PFP 8 LC-Duplex (2 LC8)



1/3 HU 1/6 Blind PFP



1/3HU 1/4 Blind PFP



1/3 HU 1/3 Blind PFP

Author: Harald Jungbäck

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

#### Port density:

■ 96 LC-Duplex ports per HU

#### **Dimensions:**

■ Width: 19" ■ Height: 1 HU

■ Depth: 200 mm and 300 mm, see product information SMAP-G2 UHD

#### Part numbers:

SMAP-G2 UHD empty distribution panels, RAL9005 black, back plane with 16 PreCONNECT® square interfaces:

1 HU, 6/6 width partition, depth 300 mm	171H0012
1 HU, 4/4 width partition, depth 300 mm	171H0011

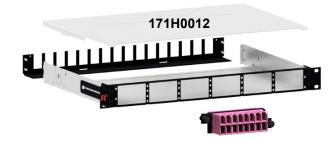
Find panels with other back plane configurations and further information in our product information SMAP-G2 UHD.

SMAP-G2 UHD panels are not appropriate for PURE trunks.

Trunks with LC-COMPACT Push-Pull-Boot (LCC-PPB) must be applied in this panel system.

LC-COMPACT Push-Pull-Boot (LCC-PPB) patchcords with cable diameter 2.0mm or thinner must be used with this panel system, to be found behind in this product information.







#### **SMAP-G2 UHD part front plates:**

Part numbers RAL9005 black							
		for fiber type					
PFP Typ	Number of PFP and type	SM PC 0°	SM APC 8°	OM4			
		blue	green	violet			
1/2 HU 1/6	Blind PFP	170H3002					
1/2 110 1/6	8 LC-Duplex (2 LC8) / 16F	170H6100	170H6101	170H6102OM4			
1/2 HU 1/4	Blind PFP		170H30	01			
1/2 110 1/4	12 LC-Duplex (6 LCQ) / 24F	170H6000	170H6001	170H6002OM4			
Find part numbers for panels factory assembled with part front plates in our product							

Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 UHD.

1HU front granularity 6/6 width partition

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

1HU front granularity 4/4 width partition							
1	3	5	7				
2	4	6	8				

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





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





# **SMAP-G2 PURE** 19" Distribution Panels empty:

Part numbers		
RAL9005 black, 300mm depth		
1HU 171A0001P		
2HU 172A0001P		
3HU 173A0001P		
5HU 175A0001P		





Standard back plane configuration for max. 12 Trunk cable dividers per panel



#### **SMAP-G2 PURE Part-Front-Plates PFP**

1HU 1/4 PFP for 12 LC-Duplex adapter-interfaces





1HU 1/2 PFP for 24 LC-Duplex adapter-interfaces





SMAP-G2 PURE 1HU 1/4 and 1/2 Part-Front-Plates part numbers RAL9005 black			
PFP type / number of adapter slots	SMAP-G2 PURE Part-Front-Plates		
1/4 Blind-PFP	without adapters 170A0001P		
1/2 Blind-PFP	170A00017 170A0002P		
1/4 / 12 LC-Duplex	170A0130P		
½ / 24 LC-Duplex	170A0170P		

#### Patchcords:

#### **Properties:**

- Kink and crush resistance optimized for environmental conditions
- Operating temperature range: Climate class C "indoor, controlled environment" acc. to IEC 60753-1, -10°C to +60°C
- Polarity:
- Full-duplex cables with duplex connectors on both sides "crossed" A to B in accordance with ISO/IEC 11801 and EN 50173

#### Length tolerances:

- Up to 1 m = 50 mm
- 2 m to 3 m = 100 mm
- 4 m to 25 m = 200 mm
- Longer than 25 m = 1 %

#### **Delivery form:**

- Attenuation (IL) measured in accordance with IEC 61300-3-4 "C" or "Substitution" method, MM 850nm/SM 1310nm, measurement values on request, or can be downloaded from our website by using the serial numbers of the patchcords <a href="https://www.rosenberger.com/products/download-measurement-data/">https://www.rosenberger.com/products/download-measurement-data/</a>
- Serial number labels with length information at both patchcord ends
- Individually packaged in foil bags with product ID label

For our SMAP-G2 HD and SMAP-G2 UHD 19" panel systems only patchcords with diameter 2.0mm or thinner should be applied.



With LC-COMPACT Push-Pull-Boot (LCC-PPB) connectors for SMAP-G2 HD and UHD 19" panel system

MDC connector for Mega High Density (MHD)

Part numbers  Duplex patchcord cable type round I-V(ZN)H and I-V(ZN)H(ZN)H FRNC-LSZH					
				OS2 APC 8°	
	MDC » MDC	variable	092A0010OM4	092A0009G657A1	on request
1.6 mm	MDC » LC-COMPACT PPB	variable	092A0012OM4	092A0011G657A1	on request
	LC-COMPACT PPB » LC-COMPACT PPB	variable	087A6949OM4	087A6948G657A1	087A6950G657A1
	LC-COMPACT » LC-COMPACT	variable	087A6623OM4	087A6620G657A1	087A6622G657A1
2.0 mm	LC-COMPACT PPB » LC-COMPACT PPB	variable	087A6737OM4	087A6738G657A1	087A6747G657A1
	MDC » MDC	variable	092A0004OM4	092A0003G657A1	on request
	MDC » LC-COMPACT	variable	092A0008OM4	092A0007G657A1	on request
	MDC » LC-COMPACT PPB	variable	092A0008OM4	092A0007G657A1	on request
2.8 mm	LC-COMPACT » LC-COMPACT	variable	087A6601OM4	087A6600G657A1	087A6609G657A1
2.0 111111	LC-COMPACT PPB » LC-COMPACT PPB	variable	087A6753OM4	087A6754G657A1	087A6755G657A1
double jacket	LC-COMPACT » LC-COMPACT	variable	087A6613OM4	087A6610G657A1	087A6612G657A1
2.8 / 5.0 mm	LC-COMPACT PPB » LC-COMPACT PPB	variable	087A6759OM4	087A6760G657A1	087A6761G657A1
echnical data of connectors, fibers and cables on request via the product profile of your selected partchcords.					



#### Patchcords:



#### Part numbers

Duplex patchcords cable type Zipcord I-V(ZN)H 2 x 2.1 mm FRNC-LSZH

Connectors	Length	OS2	OM4
LC-Duplex » LC-Duplex	variable	087A5005G657A1	087A5015OM4
LC-Duplex » SC-Duplex	variable	087A5035G657A1	087A5045OM4



#### Part numbers

Duplex patchcords cable type Zipcord I-V(ZN)H 2 x 2.8 mm FRNC-LSZH

Connectors	Length	OS2	OM4
SC-Duplex » SC-Duplex	variable	062A0180G657A1	062A0160OM4
SC-Duplex » LC-Duplex	variable	087A2068G657A1	087A2078OM4
E-2000® HRL Simplex » E-2000® HRL Simplex	variable	069A2200G657A1	-



#### Part numbers

Duplex patchcords cable type double-jacket flat-breakout I-V(ZN)HH 2 x 2.1 mm FRNC-LSZH

Connectors	Length	OS2	OM4
LC-Duplex » LC-Duplex	variable	087A1900G657A1	087A1911OM4
LC-Duplex » SC-Duplex	variable	087A2000G657A1	087A2079OM4
E-2000® HRL Simplex » E-2000® HRL Simplex	variable	069A2202G657A1	-



#### Part numbers

Duplex patchcords cable type double-jacket flat-breakout I-V(ZN)HH 2 x 2.8 mm FRNC-LSZH

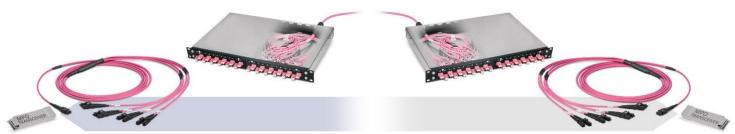
Connectors	Length	OS2	OM4	
SC-Duplex » SC-Duplex	variable	062A0179G657A1	062A0159OM4	
SC-Duplex » LC-Duplex	variable	087A2069G657A1	087A2011OM4	
E-2000® HRL Simplex » E-2000® HRL Simplex variable 069A2201G657A1 -				
Technical data of connectors, fibers and cables on request via the product profile of your selected patchcords.				



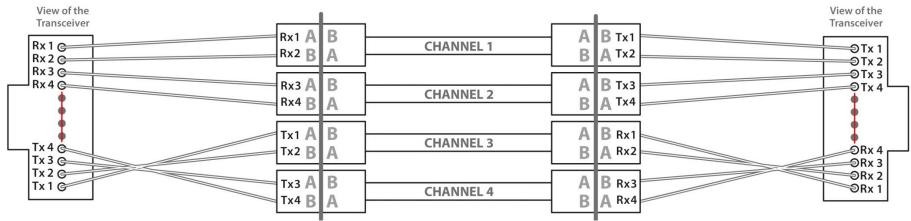
# Migration of PreCONNECT® BREAKOUT to MTP®/MPO based Parallel Optics SR4 and PSM4 Applications:

- 40/100/200 GBASE-SR4
- 4 x 16/32 GFC
- PSM4





PreCONNECT® OM4 Migrations-Harnesse MTP® 12-female/8 LC-Simplex



Numbering of the LC-Simplex of the Migration-Harnesses, to be connected to the channel wise crossed LC-Duplex infrastructure acc. to this light propagation map.

# Migration of PreCONNECT® BREAKOUT to MTP®/MPO based Parallel Optics SR4 and PSM4 Applications:

## OCTO Migrations-Harnesse MTP® 12 female to 8 Simplex connectors

- 8 fibers 3/4.5 mm double jacket cable FRNC-LSZH
- Simplex leg-lengths = 0.5m, other lengths on request
- Simplex connectors numbered with the corresponding Tx1 to Tx4 and Rx1 to Rx4 of the attached Transceivers
- Order length = total length





SR4 OM4 Part numbers	
MTP® 12 female to 8 SC-Simplex	076A0050OM4
MTP® 12 female to 8 LC-Simplex	076A0051OM4
MTP® 12 female to 8 MU-Simplex	076A0055OM4



PSM4 SM Part numbers		
MTP® 12 female to 8 LC-PC Simplex	076A0119G657A1	
MTP® 12 female to 8 LC-APC Simplex	076A0120G657A1	
MTP® 12 female to 8 MU-PC Simplex	076A0121G657A1	
MTP® 12 female o 8 MU-APC Simplex	076A0122G657A1	

#### Accessories:

Description	Part number	Pictures
19" 1 HU universal trunk cable divider holder  For the universal installation of multiple trunk cable dividers within 19" racks.	RAL9005 black 099A0085	
19" 1 HU single universal trunk cable divider holder  For the universal installation of a single trunk cable dividers within 19" racks.	RAL9005 black 099A0065	
For 19" panel accessories see our product information 19" panel accessories		

#### **Accessories:**

#### **Mini Universal Adapter Brackets**

Suitable for installation on 19" bars and for universal mounting

#### Properties and delivery form:

- Material: Powder-coated sheet steel
- Color: RAL 9005 (matt black)
- Elongated holes on all sides for universal fixing
- Adapters mounted
- No screw or cage nuts



6 x LC-Duplex

Part	Part number				
Num	ber of Adapters / Adapter type	SM PC 0° blue	OM4 violet		
2	LC-Duplex	099A0345	099A0347OM4		
4	LC-Duplex	099A0342	099A0344OM4		
6	LC-Duplex	099A0340	099A0305OM3		

#### Patch Location Rack:

#### **Applications:**

- High-density data center infrastructures
- For the construction of ultra-high-density data center patch locations

#### **Properties:**

- Innovative, restriction-free cable management system
- Rack pillars with integrated cable managers to prevent interference with cable routing
- The covers of the cable managers fold in both directions and are completely removable
- Individually selectable feedthroughs in the sides and rear walls of the large-volume cable channel for simple vertical and horizontal cable routing
- Professional routing of large cable volumes from the patchfields and storage of cable overlengths in the vertical cable managers
- Particularly suitable for fiber optic cables thanks to the use of cable clips (L-fingers) and finger slots:
- The rounded L-fingers ensure that the cables are extremely well protected against bending and kinking even when subject to strain.
- The L-fingers do not have any sharp edges and are extremely strong and resistant to breakage.
- Because there is plenty of space for them in the large finger slots, the cables are neither squeezed nor kinked.
- The L-fingers retain the cables in the finger slots whenever you need to work with the covers folded back or removed.
- Dimensions (H x L x W): 213 (46 HU) x 90 x 90 cm
- Material and color: Powder-coated steel, RAL 9005 (black)

#### Optional:

19" Intermediate Rack for the construction of rack rows with uneven numbers of racks on request

#### **Delivery form:**

- Factory-mounted on pallet (total height with pallet and packaging: 230 cm)
- Including adjustable feet for on-site installation

#### **Accessories:**

Wide range of accessories such as side walls, cable guides, excess cable storage for the top of the rack are available on request



More details in our Product Information "DC-PLR"

#### 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

Optical Solutions & Infrastructure | Endorferstr. 6 | 86167 Augsburg | GERMANY | Telephone: +49 821 24924-0 info-osi@rosenberger.com | www.rosenberger.com/osi

Rosenberger® is a registered trademark of Rosenberger Hochfrequenztechnik GmbH & Co. KG. All rights reserved. © Rosenberger 2022

For technical reasons, we reserve us the right to make any deviations from the illustrations in the product information. Transfer to third party only by authority of Rosenberger-OSI GmbH & Co. OHG- All rights reserved.

Creation date: 2017-03-30 Valid since: 2022-10-06

Revision: 010