Rosenberger

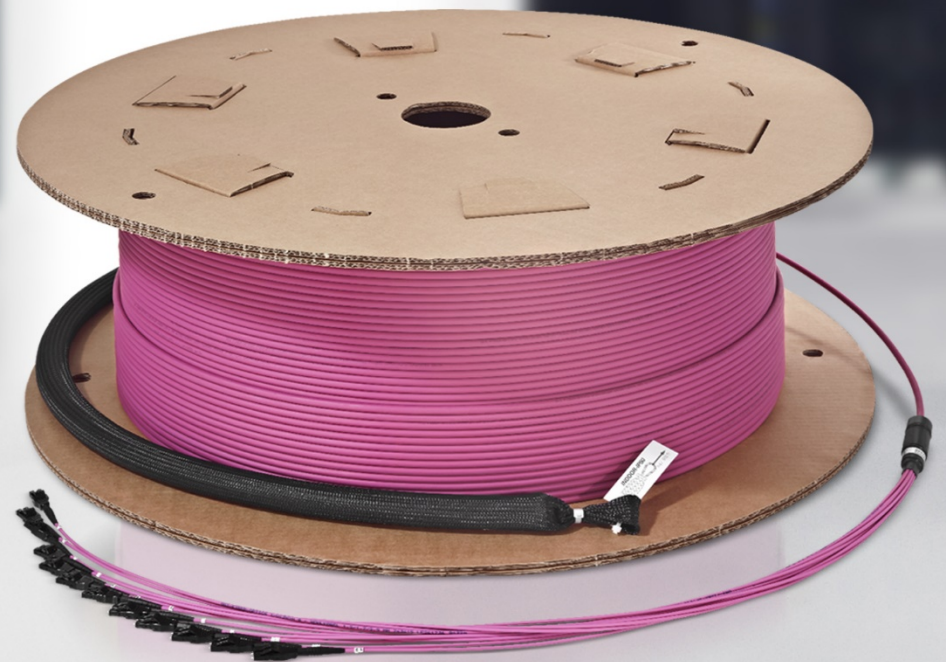## PreCONNECT® STANDARD

PreCONNECT® STANDARD solution is available in three end face quality features: BASIC, PURE, and LOTUS

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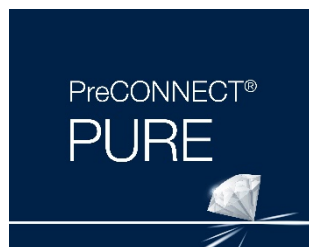
Quality feature PURE is the enhanced version of our quality feature BASIC, but with more stringent defect and cleanliness screening and factory sealed, tamper evident adapter-interfaces.

- 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 random mate insertion and return loss (mean) which enables up to six (6) mated pairs in a 10G/OM4 application up to 300m.

Quality feature LOTUS builds upon our BASIC and PURE performance by introducing our unique LOTUS end face coating technology that provides dirt, moisture, and grease repellence to maintain cleanliness in initial and subsequent matings.

- Potential long-term time savings by reducing or eliminating the need for cleaning during initial installation and subsequent MACs
- Increased reliability and availability throughout various environmental and contaminate environments

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*)

Quality feature LOTUS: Add an "**L**" to the end of the quality feature BASIC part number (*Example: XXXAXXXXL*)

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

* 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.

** Only applicable when all components are of quality feature PURE and installed by trained PURE installers.

Applications:

Infrastructure cabling within data centers, office buildings and campus

System consists of:

- Factory assembled FO loose tube cables, FRNC-LSZH indoor, universal and HDPE outdoor cables, up to 144 fibers
- With connector systems LC, SC and E-2000®
- Four 19" panel systems conventional distribution panels, SMAP-G2 SD, SMAP-G2 HD, SMAP-G2 UHD and DCP selectable
- Suitable patchcords
- Useful accessories
- Patch location rack

Features:

- For larger numbers of fibers and longer lengths:
  - Trunks up to 144 fibers
  - Up to 24 fibers practical lengths: Cost comparison by break-even calculation versus PreCONNECT® BREAKOUT
- Migration to MPO based parallel optics applications possible by using migration-harnesses

Your benefits at a glance:

- Most cost-effective solution for trunks larger 24 fibers and long 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
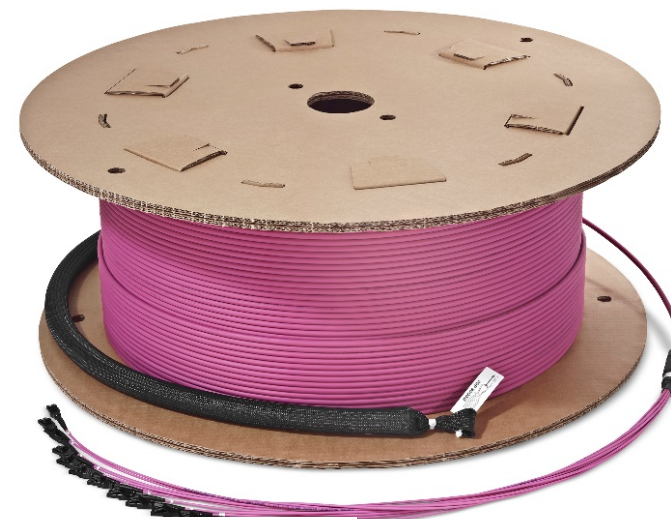
**PreCONNECT®
STANDARD trunk**
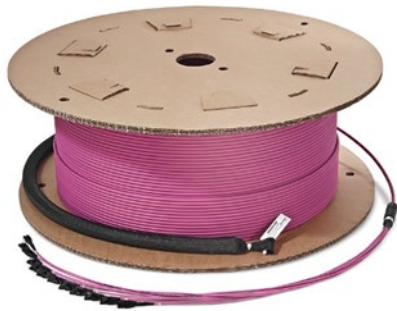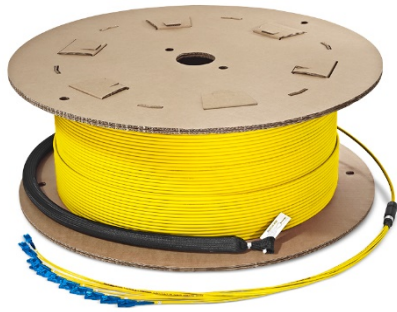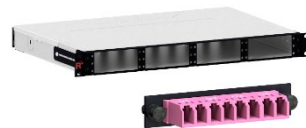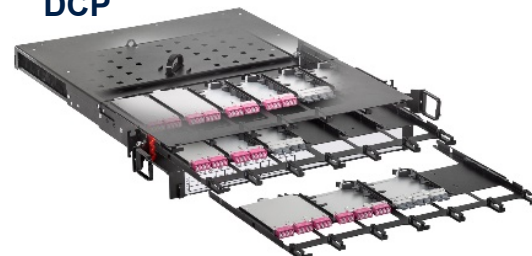
**modular
19" panel systems**

SMAP-G2 SD

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

patchcords

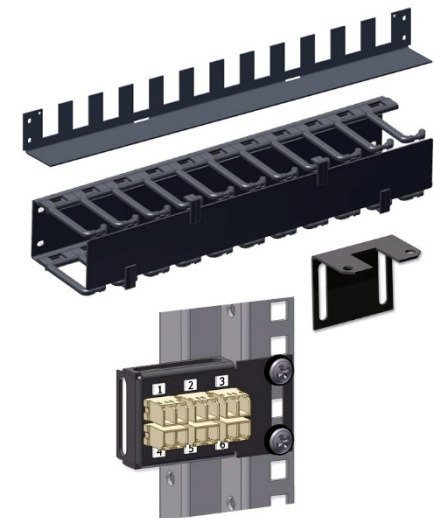**patch location rack**

SMAP-G2 HD and UHD

accessories

DCP

Applications:

Infrastructure cabling of data centers, office buildings and campus.

- **Universal to use FO cabling system up to 144 fibers per trunk**

- **Cost and attenuation optimized**

- **Focused on the useful and necessary**

System description:

Our PreCONNECT® STANDARD cabling system consists of:

- Trunk called factory assembled FO loose tube cables up to 144 fibers, with „standard stepped" connector legs
- therefore, explicitly developed 19" panel systems
- a large variety of patchcords and accessories
- and patch location racks

Rosenberger OSI brought already 1991 high fibercount factory assembled FO trunk cables to the market. PreCONNECT® STANDARD was the first in Europe developed and manufactured, high fibercount and modular „plug & play" FO cabling system.

Properties:

Both cable ends of the PreCONNECT® STANDARD trunks are molded within the cable dividers and assembled with „standard stepped" connector legs. The „standard stepped" connector legs are fitting for all PreCONNECT® panel systems.

The PreCONNECT® cable divider is a splice-less furcation to separate the fibers of loose tube cables. He is one of the mechanically and thermally most robust cable dividers for loose tube cables at smallest diameters. With its integrated PreCONNECT® square interface, the cable divider can be tool-less hooked into PreCONNECT® panels for tensile and torsion resistant fixing of the trunks.

Installation protection: The connector legs and cable dividers are equipped with 600 N tensile strength, crush resistant, kink and torsion resistant, installation tubes. Alternatively indoor IP50 dust-proof or outdoor IP67 water-proof deliverable.
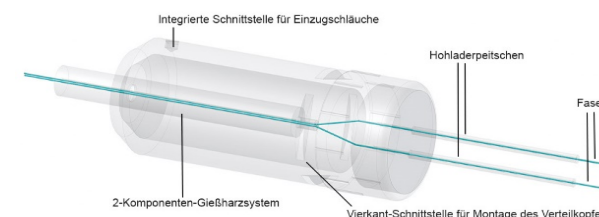
Polarity: The connector legs are alpha numerical uniquely coded. The standard polarity is „channel-wise crossed" (pairwise flipped) for full-duplex transmission systems – A1 to B1, A2 to B2, etc. On request „uncrossed" deliverable.

Integrierte Schnittstelle für Einzugschläuche
Hohladerpeitschen
Fasern
2-Komponenten-Gießharzsystem
Vierkant-Schnittstelle für Montage des Verteilkopfes

Einzugschlauch Outdoor
IP67 wasserdicht

Einzugschlauch Indoor
IP50 staubdicht

Properties:

Length definition:

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

Length tolerances:

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

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

Standard stepped "A" and "E" leg lengths and installation tube diameters of PreCONNECT® STANDARD 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	18/36	24/48	36/72	48/96	72/144
"A" leg lenths stepped from to [cm] [1]	45 to 75	45 to 75	45 to 73	45 to 89	45 to 70	45 to 89	45 to 70	45 to 70	45 to 75
"E" leg lenths stepped from to [cm] [1]	77 to 107	77 to 107	77 to 105	77 to 121	77 to 102	77 to 121	77 to 102	77 to 102	77 to 107
Outer diameter installation tube IP50 Indoor and IP67 Outdoor [mm]	30	30	30	30	40	40	55	75	75
[1] Production tolerance – 5 cm / [2] Installation tube diameter of trunks with SC-Duplex on request									

Properties:

Trunk cable types:

PreCONNECT® STANDARD trunks are deliverable with all common loose
tube cables up to 144 fibers, mostly used:

- Indoor cable I-B(ZN)BH
- Universal cable U-DQ(ZN)BH
- Outdoor cable A-DQ(ZN)B2Y

Cable data, see separate cable data sheets.

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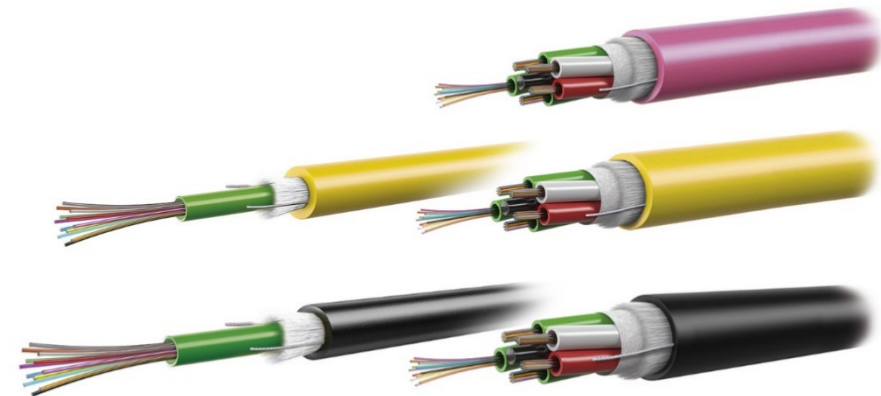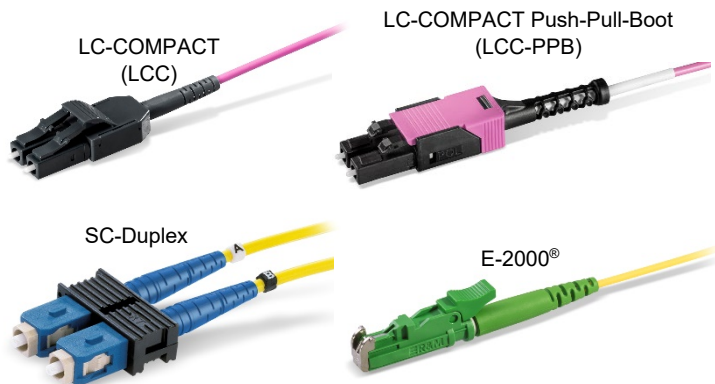
With all common fiber types deliverable.
Bend-insensitive fibers by default.
Fiber data, see separate fiber data sheets.

Connector types:

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

LC-COMPACT
(LCC)

LC-COMPACT Push-Pull-Boot
(LCC-PPB)

SC-Duplex

E-2000®

MTP® see product information
PreCONNECT® OCTO, DUODECIM und SEDECIM

MTP® Female

MTP® Male
(mit Pins)

Application of PreCONNECT® STANDARD 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	✓	✗	✓	✗	standard stepped "A length legs"
SMAP-G2 HD	72	✓	recommended	✗	✓ required	
SMAP-G2 UHD	96	✗	✓ required	✗	✓ required	
DCP	72	✓	✗	✓	✗	extended stepped "E length legs"
Conventional	24	✓	✗	✓	✗	standard stepped "A length legs
ODF LARO	144 in 5 ETSI HU	✓	recommended	✗	✓ required	extended stepped "E length legs"

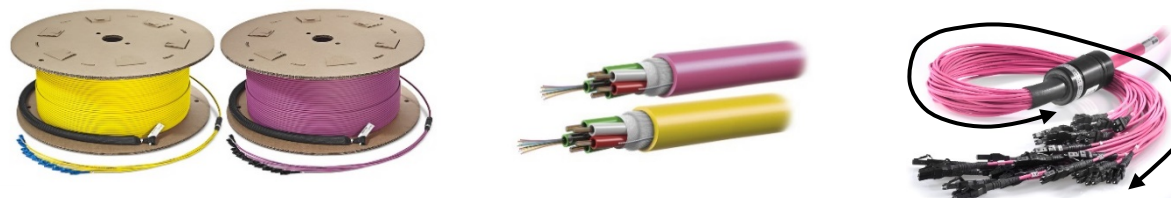| SMAP-G2 SD	SMAP-G2 HD	SMAP-G2 UHD	DCP	conventional distribution panels	ODF LARO
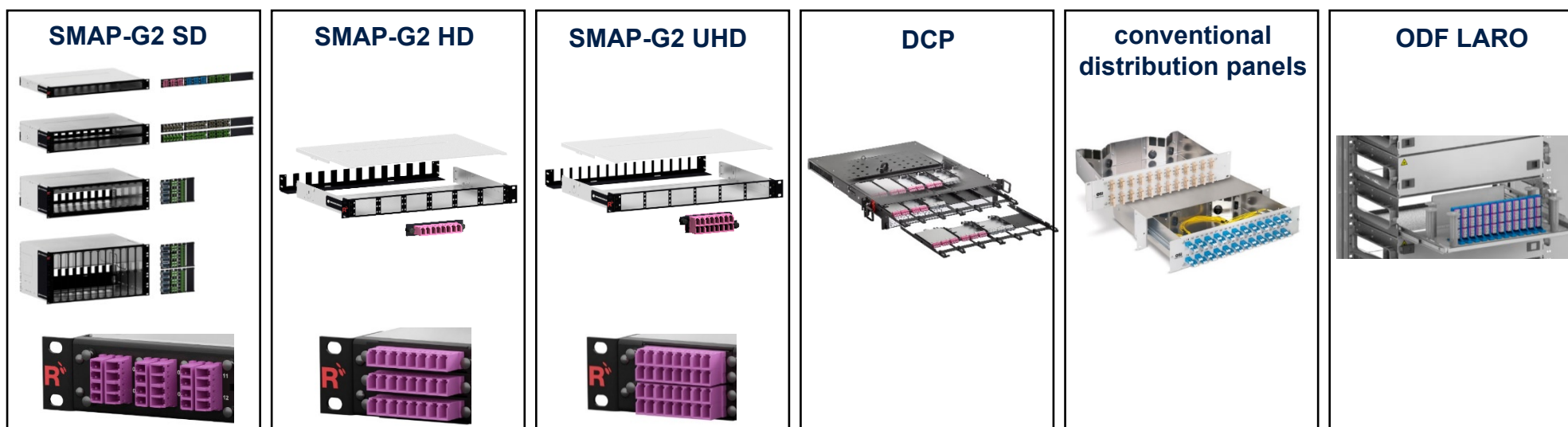
LC-COMPACT (LCC)

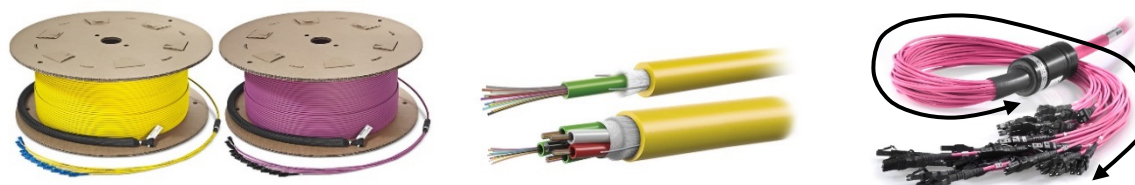**LC-COMPACT Push-Pull-Boot (LCC-PPB)**
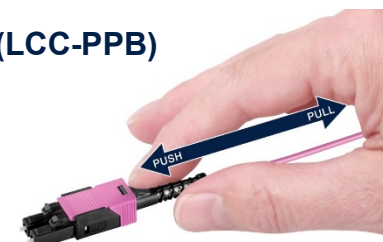
**PreCONNECT® STANDARD trunks
with indoor cable I-B(ZN)BH
CPR class B2ca:**

PreCONNECT® STANDARD Trunks with extended stepped „E length legs" must be applied in DCP and ODF LARO panels.

Part numbers

Channels/ Fibers	Connectors on both sides	With standard stepped "A length legs" compatible to all our SMAP and conventional panels			With extended stepped "E length legs" compatible to DCP and ODF LARO panels		
		SM PC 0°	SM APC 8°	OM4	SM PC 0°	SM APC 8°	OM4
6/12	LCC	024A0195G657A1	024A0143G657A1	024A0142OM4	024E0195G657A1	024E0143G657A1	024E0142OM4
	LCC-PPB	024A0225G657A1	024A0226G657A1	024A0227OM4	024E0225G657A1	024E0226G657A1	024E0227OM4
	SC-Duplex	on request	on request	on request	on request	on request	on request
	E-2000® Simplex	on request	on request	on request	on request	on request	on request
12/24	LCC	024A0175G657A1	024A0144G657A1	024A0127OM4	024E0175G657A1	024E0144G657A1	024E0127OM4
	LCC-PPB	024A0228G657A1	024A0229G657A1	024A0230OM4	024E0228G657A1	024E0229G657A1	024E0230OM4
	SC-Duplex	024A0179G657A1	on request	024A0178OM4	024E0179G657A1	on request	024E0178OM4
	E-2000® Simplex	on request	on request	on request	on request	on request	on request
24/48	LCC	024A0102G657A1	024A0126G657A1	024A0103OM4	024E0102G657A1	024E0126G657A1	024E0103OM4
	LCC-PPB	024A0231G657A1	024A0232G657A1	024A0233OM4	024E0231G657A1	024E0232G657A1	024E0233OM4
	SC-Duplex	024A0147G657A1	024A0177G657A1	024A0169OM4	024E0147G657A1	024E0177G657A1	024E0169OM4
	E-2000® Simplex	on request	024A0149G657A1	on request	on request	024E0149G657A1	on request
48/96	LCC	024A0106G657A1	024A0128G657A1	024A0107OM4	024E0106G657A1	024E0128G657A1	024E0107OM4
	LCC-PPB	024A0234G657A1	024A0235G657A1	024A0236OM4	024E0234G657A1	024E0235G657A1	024E0236OM4
	SC-Duplex	on request	on request	on request	on request	on request	on request
	E-2000® Simplex	on request	on request	on request	on request	on request	on request
72/144	LCC	024A0108G657A1	024A0129G657A1	024A0109OM4	024E0108G657A1	024E0129G657A1	024E0109OM4
	LCC-PPB	024A0237G657A1	024A0238G657A1	024A0239OM4	024E0237G657A1	024E0238G657A1	024E0239OM4
	SC-Duplex	on request	on request	on request	on request	on request	on request
	E-2000® Simplex	on request	on request	on request	on request	on request	on request

**PreCONNECT® STANDARD trunks
with universal cable U-DQ(ZN)BH
CPR class Dca:**

PreCONNECT® STANDARD Trunks with extended stepped „E length legs" must be applied in DCP and ODF LARO panels.

Part numbers

Channels/ Fibers	Connectors on both sides	With standard stepped "A length legs" compatible to all our SMAP and conventional panels			With extended stepped "E length legs" compatible to DCP and ODF LARO panels		
		SM PC 0°	SM APC 8°	OM4	SM PC 0°	SM APC 8°	OM4
6/12	LCC	031A1800G657A1	031A1831G657A1	031A1810OM4	031E1800G657A1	031E1831G657A1	031E1810OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	031A1504G657A1	on request	031A1604OM4	031E1504G657A1	on request	031E1604OM4
	E-2000® Simplex	on request	031A1013G657A1	on request	on request	031E1013G657A1	on request
12/24	LCC	031A1801G657A1	031A1808G657A1	031A1811OM4	031E1801G657A1	031E1808G657A1	031E1811OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	031A1506G657A1	on request	031A1606OM4	031E1506G657A1	on request	031E1606OM4
	E-2000® Simplex	on request	031A1015G657A1	on request	on request	031E1015G657A1	on request
24/48	LCC	031A1803G657A1	031A1807G657A1	031A1813OM4	031E1803G657A1	031E1807G657A1	031E1813OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	031A1508G657A1	on request	031A1608OM4	031E1508G657A1	on request	031E1608OM4
	E-2000® Simplex	on request	031A1016G657A1	on request	on request	031E1016G657A1	on request
48/96	LCC	031A1805G657A1	on request	031A1815OM4	031E1805G657A1	on request	031E1815OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	031A1511G657A1	on request	031A1611OM4	031E1511G657A1	on request	031E1611OM4
	E-2000® Simplex	on request	031A1009G657A1	on request	on request	031E1009G657A1	on request
72/144	LCC	031A1806G657A1	on request	031A1816OM4	031E1806G657A1	on request	031E1816OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	031A1510G657A1	on request	031A1610OM4	031E1510G657A1	on request	031E1610OM4
	E-2000® Simplex	on request	031A1018G657A1	on request	on request	031E1018G657A1	on request

**PreCONNECT® STANDARD trunks
with outdoor cable A-DQ(ZN)B2Y:**

PreCONNECT® STANDARD Trunks with extended stepped „E length legs" must be applied in DCP and ODF LARO panels.

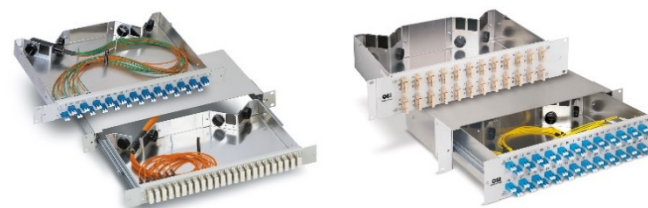| Part numbers							
Chan-nels/ Fibers	Connectors on both sides	With standard stepped "A length legs" compatible to all our SMAP and conventional panels			With extended stepped "E length legs" compatible to DCP and ODF LARO panels		
		SM PC 0°	SM APC 8°	OM4	SM PC 0°	SM APC 8°	OM4
6/12	LCC	010A2079G657A1	on request	010A2080OM4	010E2079G657A1	on request	010E2080OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	010A1504G657A1	on request	010A1604OM4	010E1504G657A1	on request	010E1604OM4
	E-2000® Simplex	on request	010A1013G657A1	on request	on request	010E1013G657A1	on request
12/24	LCC	010A2077G657A1	on request	010A2078OM4	010E2077G657A1	on request	010E2078OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	010A1506G657A1	on request	010A1606OM4	010E1506G657A1	on request	010E1606OM4
	E-2000® Simplex	on request	010A1015G657A1	on request	on request	010E1015G657A1	on request
24/48	LCC	010A1801G657A1	on request	010A1813OM4	010E1801G657A1	on request	010E1813OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	010A1508G657A1	on request	010A1608OM4	010E1508G657A1	on request	010E1608OM4
	E-2000® Simplex	on request	010A1016G657A1	on request	on request	010E1016G657A1	on request
48/96	LCC	010A2075G657A1	on request	010A2076OM4	010E2075G657A1	on request	010E2076OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	010A1511G657A1	on request	on request	010E1511G657A1	on request	on request
	E-2000® Simplex	on request	010A1009G657A1	on request	on request	010E1009G657A1	on request
72/144	LCC	010A1806G657A1	on request	010A1816OM4	010E1806G657A1	on request	010E1816OM4
	LCC-PPB	on request	on request	on request	on request	on request	on request
	SC-Duplex	010A1510G657A1	on request	on request	010E1510G657A1	on request	on request
	E-2000® Simplex	on request	010A1018G657A1	on request	on request	010E1018G657A1	on request

PreCONNECT® 19" 1 and 2 HU conventional 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 aluminium, RAL 7035 (light gray)

- Depth: 250 mm
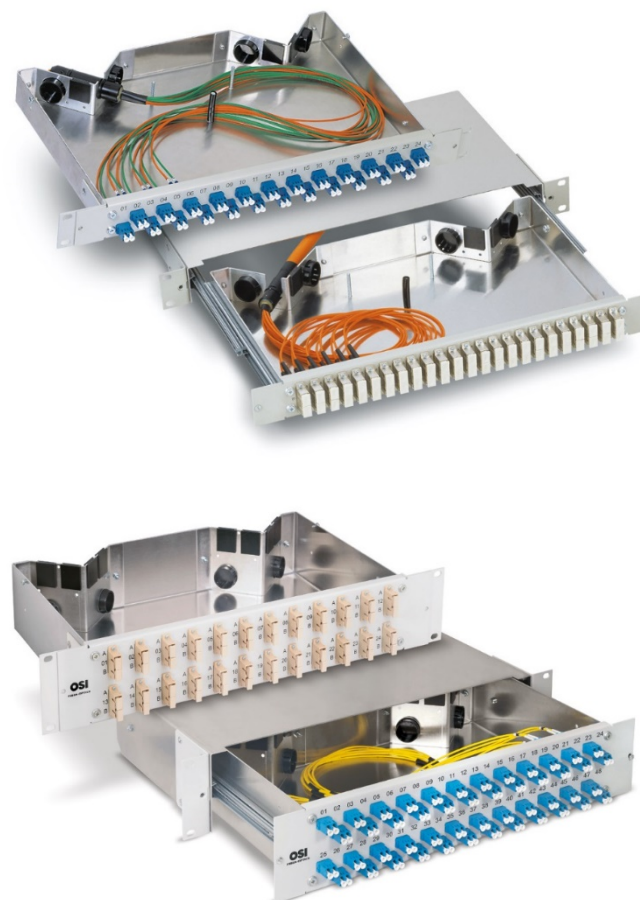
These panels are not appropriate for PURE trunks

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

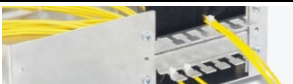### Part numbers 1 HU RAL 7035 (light gray)
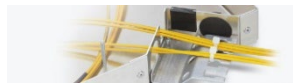
Number of chan-nels / fibers	Adapter type	Fixed installation		Telescopic complete pullout	
		SM	OM4	SM	OM4
6/12	LC-Duplex PC 0°	231A0173	231A1293OM4	230A0173	230A1293OM4
	SC-Duplex plastic PC 0°	231A0420	231A0440OM4	230A0420	230A0440OM4
	SC-Duplex metal	231A0153	231A0013	230A0153	230A0013
	E-2000® HRL Simplex APC 8°	231A1003	---	230A1003	---
12/24	LC-Duplex PC 0°	231A0175	231A1295OM4	230A0175	230A1295OM4
	SC-Duplex plastic PC 0°	231A0421	231A0441OM4	230A0421	230A0441OM4
	SC-Duplex metal	231A0155	231A0015	230A0155	230A0015
	E-2000® HRL Simplex APC 8°	231A1005	---	230A1005	---
24/48	LC-Duplex PC 0°	231A0177	231A1298OM4	230A0177	230A1298OM4
	SC-Duplex plastic PC 0°	231A0422	231A0442OM4	230A0422	230A0442OM4
	SC-Duplex metal	231A0158	231A0018	230A0158	230A0018

Part numbers 2 HU RAL 7035 (light gray)

Number of chan-nels / fibers	Adapter type	Fixed installation		Telescopic complete pullout	
24/48	LC-Duplex PC 0°	235A1287	235A1317OM4	234A1287	234A1317OM4
	SC-Duplex plastic PC 0°	235A0180	235A0400OM4	234A0180	234A0400OM4
	SC-Duplex metal	235A0157	235A0017	234A0157	234A0017
	E-2000® HRL Simplex APC 8°	235A1007	---	234A1007	---
48/96	LC-Duplex PC 0°	235A1289	235A1319OM4	234A1289	234A1319OM4
	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	

Part numbers accessories 2 HU			
Tertiary cable support standard	1 pcs.	111A0403	
Tertiary cable support large with brush	1 pcs.	111A0611	
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	

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

Port density:
- 48 LC-Duplex ports per HU

Dimensions:
- Width: 19"
- Height: 1, 2, 3 and 5 HU
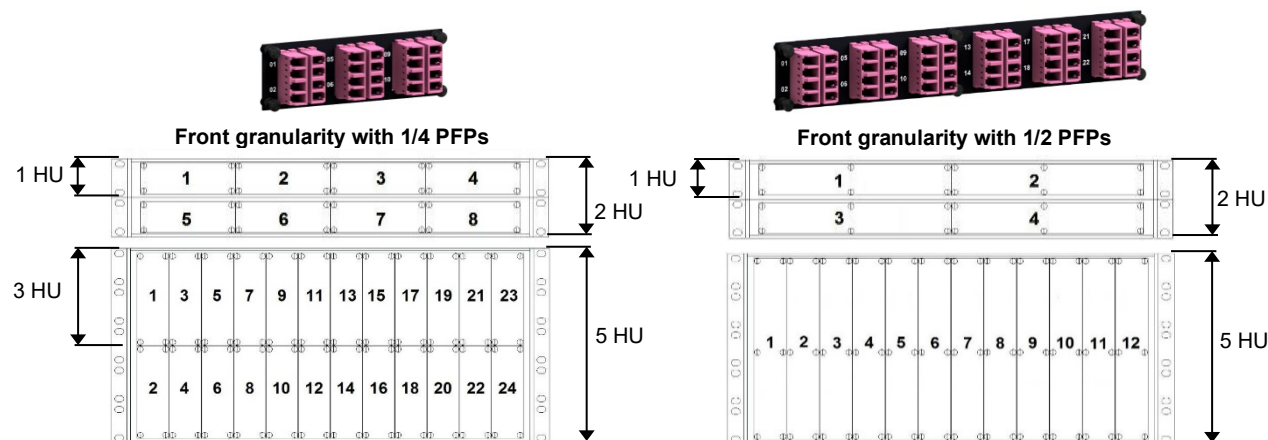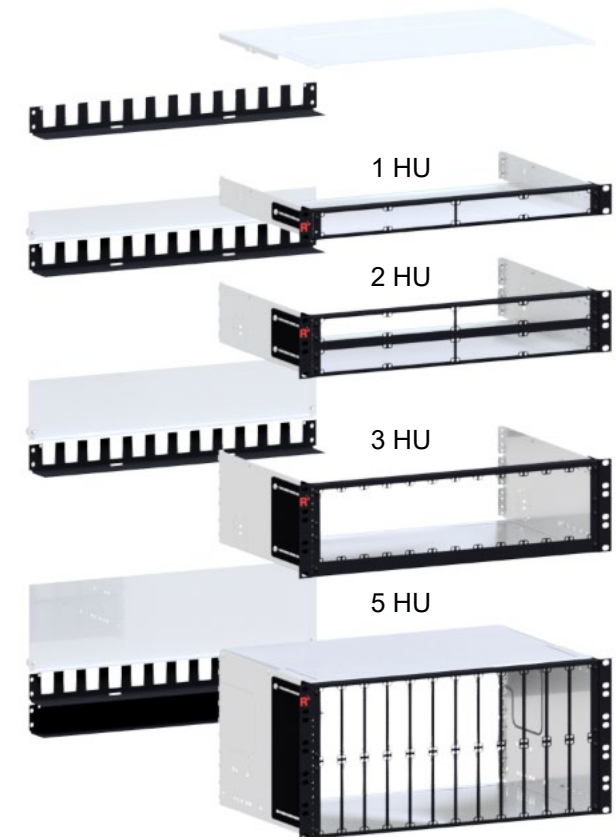- Depth: 200 mm and 300 mm, see product information SMAP-G2 SD

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.**

1 HU

2 HU

3 HU

5 HU

Front granularity with 1/4 PFPs

Front granularity with 1/2 PFPs

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

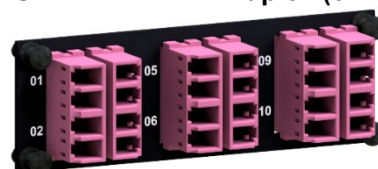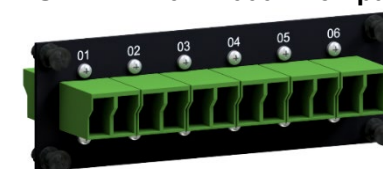| Part numbers RAL9005 black			
Number of adapter type/fibers	**for fiber type**		
	SM PC 0° blue	SM APC 8° green	OM4 violet
Blind PFP	170A0001		
6 LC-Duplex / 12F	170A0110	170A0120	170A0130OM4
12 LC-Duplex (6 LCQ) / 24F	170A0210	170A0220	170A0230OM4
6 SC-Duplex / 12F	170A0410	170A0420	170A0430OM4
6 E-2000®-Compact / 12F	170A0510	170A0520	---
Find part numbers for panels factory assembled with part front plates in our product information SMAP-G2 SD.			

1 HU 1/4 Blind PFP

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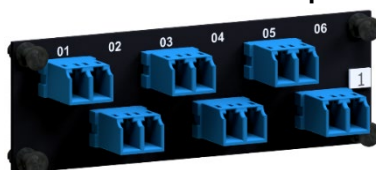
1 HU 1/4 PFP 12 LC-Duplex (6 LCQ)

1 HU 1/4 PFP 6 SC-Duplex

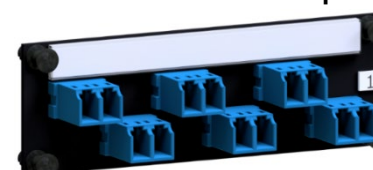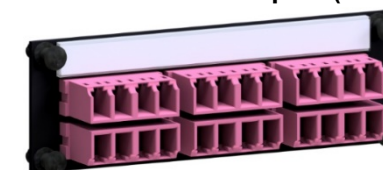**1 HU 1/4 PFP 6 E-2000®-Compact**

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

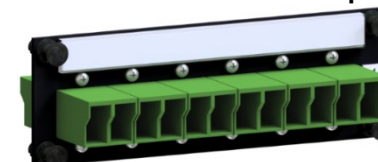| Part numbers RAL9005 black			
Number of adapter type/fibers	**for fiber type**		
	SM PC 0° blue	SM APC 8° green	OM4 violet
6 LC-Duplex / 12F	170A3110	170A3120	170A3130OM4
12 LC-Duplex (6 LCQ) / 24F	170A3210	170A3220	170A3230OM4
6 E-2000®-Compact / 12F	170A0510	170A0520	---
Find part numbers for panels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

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

Part numbers RAL9005 black			
Number of adapter type/fibers	**for fiber type**		
	SM PC 0° blue	SM APC 8° green	OM4 violet
Blind PFP	170A0002		
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 in our product information SMAP-G2 SD.			

1 HU 1/2 Blind PFP

1 HU 1/2 PFP 12 LC-Duplex

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 HU
- Width: 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

Fixing of PreCONNECT® STANDARD 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
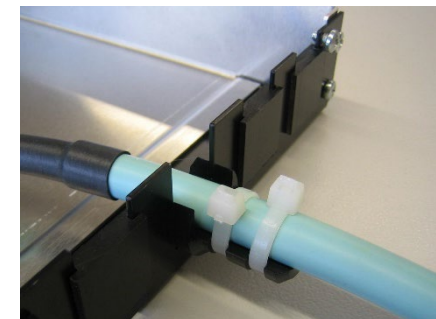
PreCONNECT® SMAP-G2 High Density (HD) 19" panel system:

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

171H0013

171H0010

171H0015

172H0002
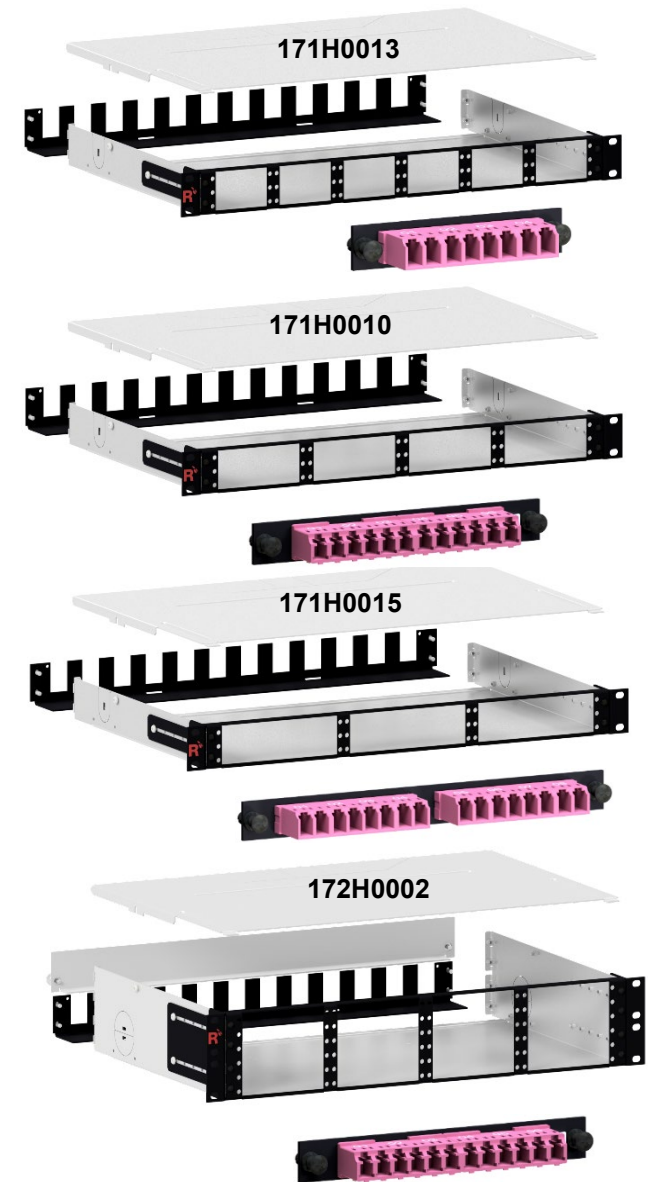
SMAP-G2 HD part front plates:

Part numbers RAL9005 black				
PFP Typ	**Number of PFP and type**	**for fiber type**		
		SM PC 0° blue	SM APC 8° green	OM4 violet
1/3 HU 1/6	Blind PFP	170H0002		
	4 LC-Duplex (1 LC8) / 8F	170H2100	170H2101	170H2102OM4
1/3 HU 1/4	Blind PFP	170H0001		
	6 LC-Duplex (2 LC6) / 12F	170H2000	170H2001	170H2002OM4
1/3 HU 1/3	Blind PFP	170H0003		
	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 OCTO 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 DUODECIM width partition

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

1HU front granularity 3/3 SEDECIM width partition

1	4	7
2	5	8
3	6	9

1/3 HU 1/6 PFP 4 LC-Duplex (1 LC8)
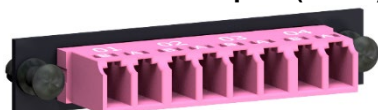
1/3 HU 1/4 PFP 6 LC-Duplex (2 LC6)

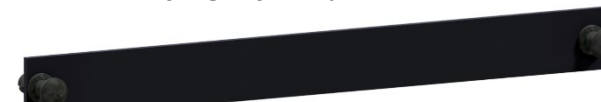

1/3 HU 1/3 PFP 8 LC-Duplex (2 LC8)

1/3 HU 1/6 Blind PFP

1/3HU 1/4 Blind PFP

1/3 HU 1/3 Blind PFP

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.

171H0012

171H0011
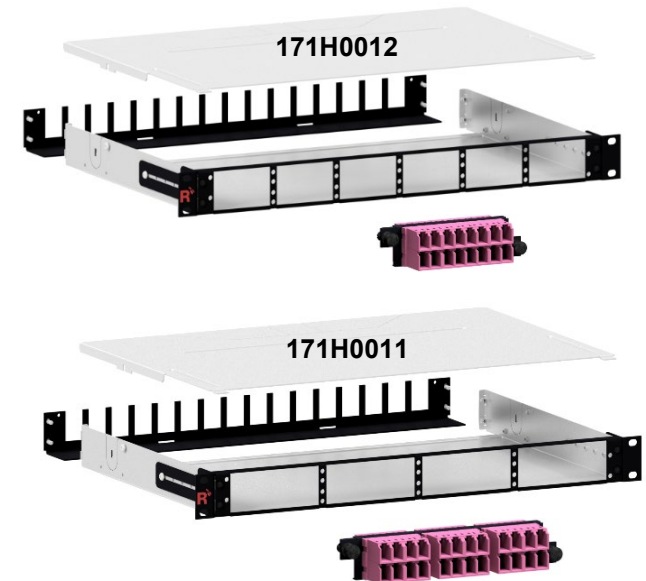
SMAP-G2 UHD part front plates:

| Part numbers RAL9005 black				
PFP Typ	**Number of PFP and type**	**for fiber type**		
		SM PC 0° blue	SM APC 8° green	OM4 violet
1/2 HU 1/6	Blind PFP	170H3002		
	8 LC-Duplex (2 LC8) / 16F	170H6100	170H6101	170H6102OM4
1/2 HU 1/4	Blind PFP	170H3001		
	12 LC-Duplex (6 LCQ) / 24F	170H6000	170H6001	170H6002OM4
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)
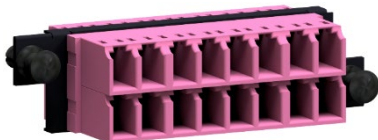
1/2 HU 1/4 PFP 12 LC-Duplex (6 LCQ)

1/2 HU 1/6 Blind PFP

1/2 HU 1/4 Blind PFP

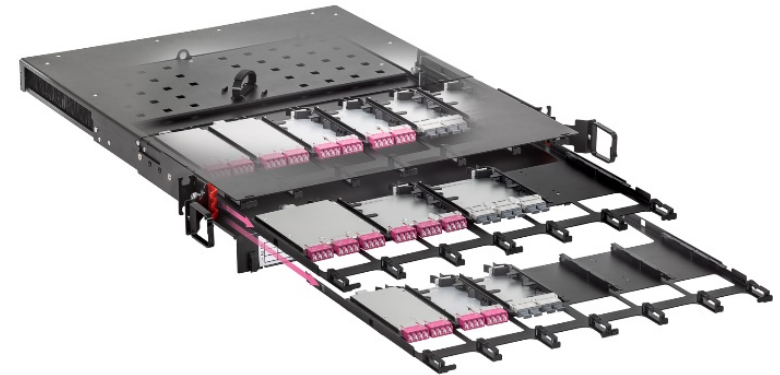## PreCONNECT® Data Center Panel (DCP) 19" panel system:

Portdichte:
- 72 LC-Duplex ports per HU

PreCONNECT® STANDARD Trunks with extended stepped „E length legs" and conventional LCC connectors must be applied in DCP.

Dimensions:
- Width: 19"
- Height: 1 HU
- Depth: see product information DCP

Part numbers:

DCP empty panel, RAL9005 black, inclusive module drawers according to product information DCP:

With universal trunk management:
- 1 HU, 6/6 OCTO width partition: 165A0001
- 1 HU, 4/4 DUODECIM width partition: 165A0003
- 1 HU, 3/3 DUODECIM width partition: 165A0011

With Big-Boy`s-Home:
- 1 HU, 6/6 OCTO width partition: 165A0002
- 1 HU, 4/4 DUODECIM width partition: 165A0004
- 1 HU, 3/3 DUODECIM width partition: 165A0012

Blind cover to cover the unused slots within module drawers:

- Width 1/6, set consisting of 6 pcs.: 165A3007
- Width 1/4, set consisting of 4 pcs.: 165A3008
- Width 1/3, set consisting of 3 pcs.: 165A3009

Modular toolless mountable, height unit neutral patchcord guide.
Set consisting of 2 pcs. fitting for 1 HU panels: 165A3006

DCP panels are not appropriate for PURE trunks.

Find further information in our product information DCP.

6/6 OCTO width partition

4/4 DUODECIM width partition

3/3 SEDECIM width partition

DCP LC-Duplex adapter inserts fitting for PreCONNECT® OCTO trunks:

Properties:

- For direct patch of PreCONNECT® STANDARD trunks with LC-COMPACT connectors
- Height: 1/3 HU
- Width: 1/6, 1/4 and 1/3
- Depth: 115 mm
- LC-Duplex ports at the front side with integrated dust and laser protection shutters, translucent for Visual Fault Locator (Laserpointer)
- Toolless placement of the inserts into the slots of module drawers of the panel from the front and rear side possible


1/6 width partition
4 LC-Duplex ports

1/4 width partition
6 LC-Duplex ports

1/3 width partition
8 LC-Duplex ports
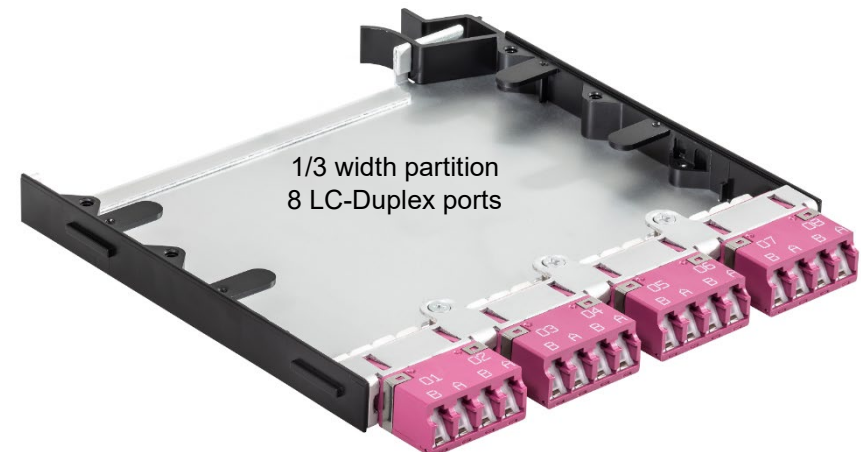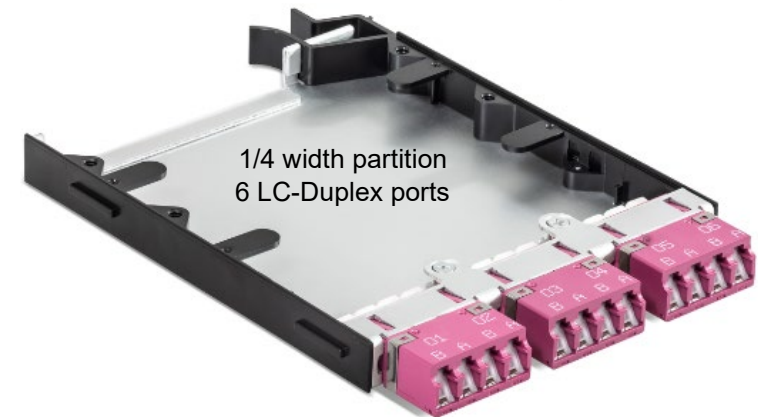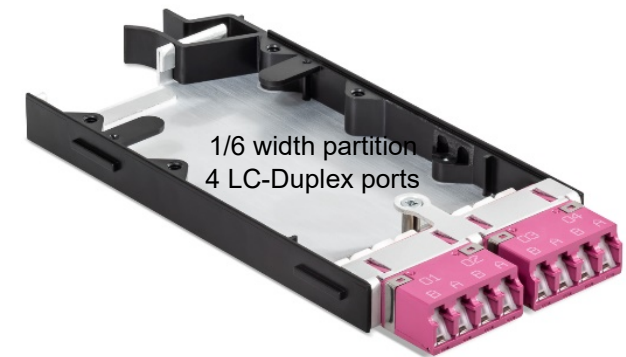
Part numbers				
Insert type	**Number and type of port**	**for fiber type**		
		OM4 violet	**SM PC 0°** blue	**SM APC 8°** green
1/3 HU 1/6	4 x LC-Duplex	165A2001OM4	165A2002	165A2003
1/3 HU 1/4	6 x LC-Duplex	165A2010OM4	165A2011	165A2012
1/3 HU 1/3	8 x LC-Duplex	165A2020OM4	165A2023	165A2024
Find part numbers for panels factory assembled with part front plates in our product information DCP.				

SMAP-G2 SD PURE
19" distribution panels empty:

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

PreCONNECT® PURE LC-Duplex
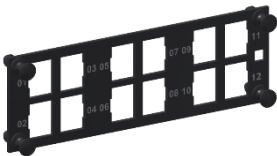adapter-interface
at trunk connector legs
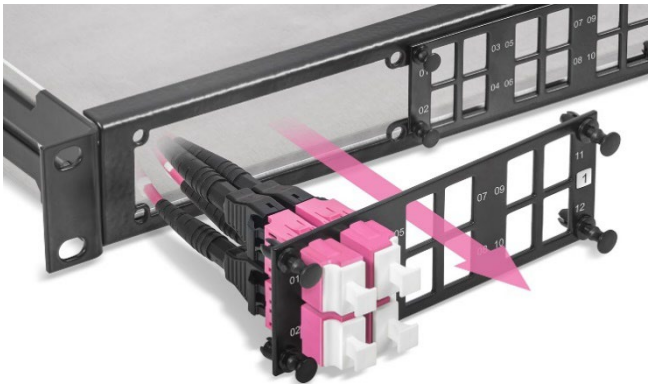
Standard back plane configuration for max. 12 Trunk cable dividers per panel
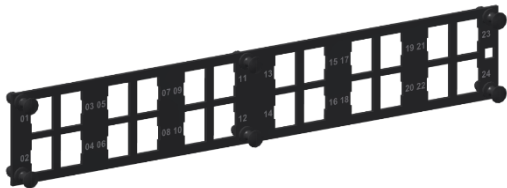

SMAP-G2 SD PURE part-front-plates PFP

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

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

1 HU 1/4 blind-PFP

1 HU 1/2 blind-PFP

SMAP-G2 SD PURE 1 HU 1/4 and 1/2 part-front-plates part numbers RAL9005 black	
PFP type / number of adapter slots	SMAP-G2 PURE part-front-plates without adapters
1/4 blind-PFP	170A0001P
1/2 blind-PFP	170A0002P
1/4 / 12 LC-Duplex	170A0130P
1/2 / 24 LC-Duplex	170A0170P

Patchcords:

Properties:
- Kink and crush resistance optimized for environmental conditions
- Suitable for operation in temperatures from -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 measured in accordance with IEC 61300-3-4 „C" or „Substitution" method, measurement values on request
- Serial number labels at the cable ends on both sides
- Individually packaged in foil bags with product ID label

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

With LC-COMPACT (LCC) connectors for SMAP-G2 SD and DCP 19" panel system

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

Part numbers Duplex Patchcord cable type round I-V(ZN)H and I-V(ZN)H(ZN)H FRNC-LSZH						
Cable diameter	**Connectors**	**Length**	**OM4**	**SM PC 0°**	**SM APC 8°**
2.0 mm	LC-Compact » LC-Compact	variable	087A6623OM4	087A6620G657A1	087A6622G657A1
	LC-Compact PPB » LC-Compact PPB	variable	087A6737OM4	087A6738G657A1	on request
2.8 mm	LC-Compact » LC-Compact	variable	087A6601OM4	087A6600G657A1	087A6609G657A1
	LC-Compact PPB » LC-Compact PPB	variable	on request	on request	on request
double jacket 2.8 / 5.0mm	LC-Compact » LC-Compact	variable	087A6613OM4	087A6610G657A1	087A6612G657A1
	LC-Compact PPB » LC-Compact PPB	variable	on request	on request	on request

Patchcords:

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

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

With other connectors and fiber types on request.

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

Connectors	Length	SM	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	-

With other connectors and fiber types on request.

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

Connectors	Length	SM	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	-

With other connectors and fiber types on request.

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

| Connectors	Length	SM	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	-

With other connectors and fiber types on request.

Migration of PreCONNECT® STANDARD
to MTP®/MPO based parallel optics SR4 and PSM4 applications:

- 40/100/200 GBASE-SR4
- 4 x 16/32 GFC
- PSM4
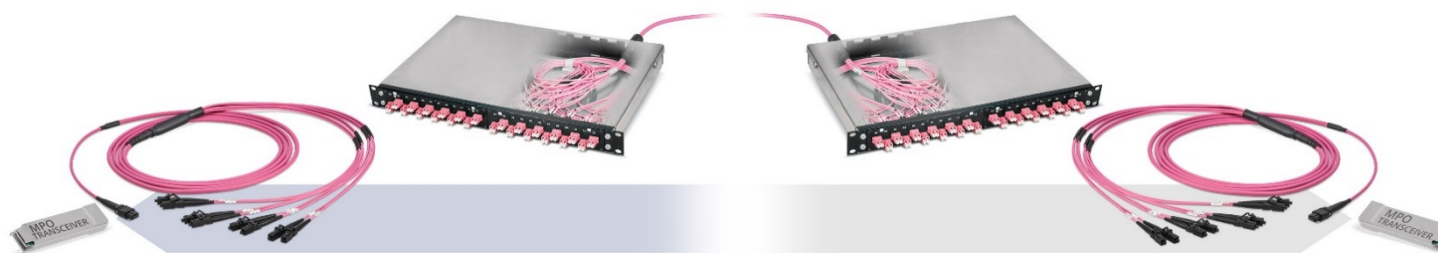
PreCONNECT® OM4 migrations-harnesses MTP® 12-female/8 LC-Simplex
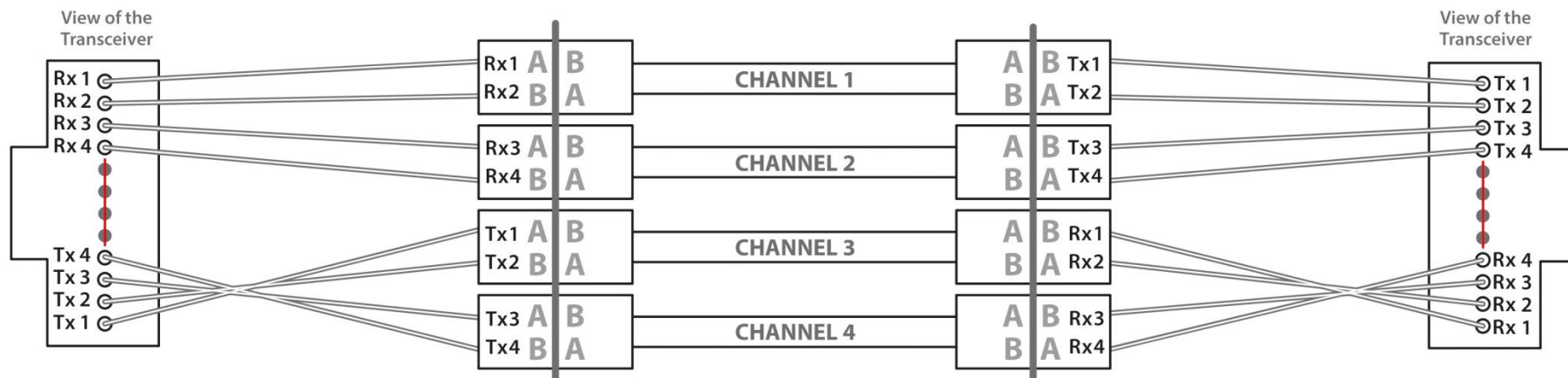
Numbering of the LC-Simplex of the migration-harnesses, to be connected to the channel wise crossed LC-Duplex infrastructure acc. to this light propagation map.

**Migration of PreCONNECT® STANDARD
to MTP®/MPO based parallel optics SR4 and PSM4
applications:**

**OCTO migrations-harnesses
MTP® 12 female to 8 simplex connectors**

- 8 fibers 3 / 4.5 mm double-jacket cable FRNC-LSZH

- Simplex leg-lengths = 0.5 m, 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
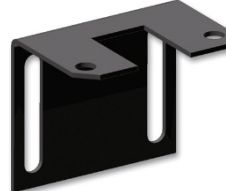

SR4 OM4 Part numbers	
MTP® 12 female to 8 SC-Simplex	076A0050OM4
MTP® 12 female to 8 LC-Simplex	076A0051OM4
MTP® 12 female to 8 MU-Simplex	076A0055OM4

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 to 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
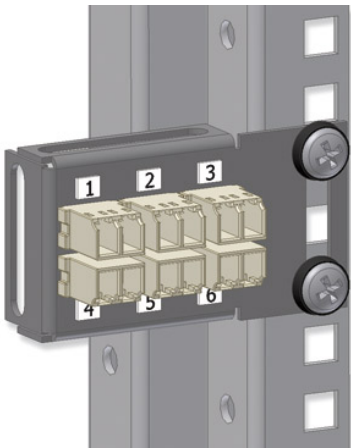
6 x LC-Duplex

Part number			
Number 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