Rosenberger

PreCONNECT® STANDARD



PreCONNECT® STANDARD 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)

^{*} 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, MDC, SC and E-2000[®]
- 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 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



Rosenberger

PreCONNECT® STANDARD trunk



modular 19" panel systems

SMAP-G2 SD







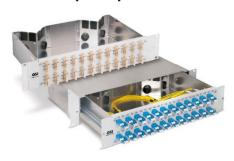








conventional 19" 1 and 2 HU distribution panels fixed installation and telescopic complete pullout



patchcords



patch location rack



accessories





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.

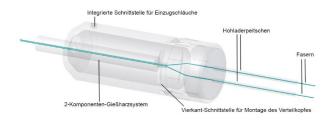
Properties:

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 "channelwise crossed" (pairwise flipped) for full-duplex transmission systems – A1 to B1, A2 to B2, etc. On request "uncrossed" deliverable.





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% |

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

| 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) | "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 | | | | | | | | 77 to 107 |
| Outer diameter installation tube IP50 Indoor and IP67 Outdoor [mm] 30 30 30 40 40 55 75 75 | | | | | | | | | |
| 1) Production tolerance – 5 cm / 2) Installation to | ıbe diameter | of trunks wit | h 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, CPR class B2ca
- Universal cable U-DQ(ZN)BH, CPR class Dca or Cca dependent on stock
- Outdoor cable A-DQ(ZN)B2Y

Cable data, see separate cable data sheets.

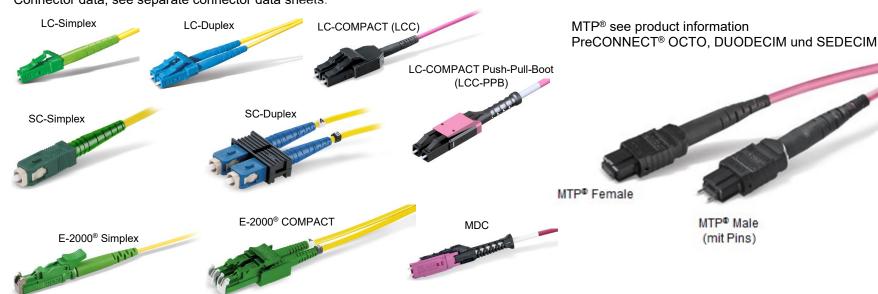
Fiber types:

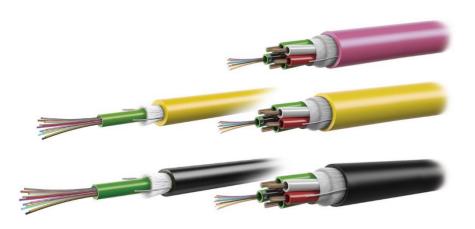
With all common fiber types deliverable. Bend-insensitive fibers by default. Fiber data, see separate fiber data sheets.

Connector types:

With all common connector types deliverable.

Connector data, see separate connector data sheets.





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 | ~ | × | ~ | X | |
| SMAP-G2 HD | 72 | ~ | recommended | × | ✓ required | standard stepped "A length legs" |
| SMAP-G2 UHD | 96 | × | ✓ required | × | required | A length legs |
| Conventional | 24 | ~ | × | ~ | × | standard stepped "A length legs |
| ODF LARO | 144 in 5 ETSI HU | ~ | recommended | × | required | extended stepped "E length legs" |











LC-COMPACT (LCC)





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 ODF LARO panels.

| Part numb | pers | | | | | | | |
|----------------|---------------------------|------------------------------|---|-------------|---|----------------|-------------|--|
| Channels/ | Connectors on | | pped "A length legs" AP and conventional | | With extended stepped "E length legs" compatible to ODF LARO panels | | | |
| Fibers | both sides | SM PC 0° | SM APC 8° | OM4 | SM PC 0° | SM APC 8° | OM4 | |
| | LCC | 024A0195G657A1 | 024A0143G657A1 | 024A0142OM4 | 024E0195G657A1 | 024E0143G657A1 | 024E0142OM4 | |
| 6/12 | LCC-PPB | 024A0225G657A1 | 024A0226G657A1 | 024A0227OM4 | 024E0225G657A1 | 024E0226G657A1 | 024E0227OM4 | |
| | MDC | on request | on request | on request | on request | on request | on request | |
| | LCC | 024A01187G657A1 | on request | 024A0188OM4 | on request | on request | on request | |
| 8/16 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | 024A0260G657A1 | auf Anfrage | 024A0259OM4 | on request | on request | on request | |
| | LCC | 024A0175G657A1 | 024A0144G657A1 | 024A0127OM4 | 024E0175G657A1 | 024E0144G657A1 | 024E0127OM4 | |
| 12/24 | LCC-PPB | 024A0228G657A1 | 024A0229G657A1 | 024A0230OM4 | 024E0228G657A1 | 024E0229G657A1 | 024E0230OM4 | |
| | MDC | 024A0244G657A1 | on request | 024A0261OM4 | on request | on request | on request | |
| | LCC | 024A0163G657A1 | on request | 024A0165OM4 | on request | on request | on request | |
| 16/32 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | 024A0262G657A1 | on request | 024A0263OM4 | on request | on request | on request | |
| | LCC | 024A0100G657A1 | on request | 024A0101OM4 | on request | on request | on request | |
| 18/36 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | on request | on request | on request | on request | on request | on request | |
| | LCC | 024A0102G657A1 | 024A0126G657A1 | 024A0103OM4 | 024E0102G657A1 | 024E0126G657A1 | 024E0103OM4 | |
| 24/48 | LCC-PPB | 024A0231G657A1 | 024A0232G657A1 | 024A0233OM4 | 024E0231G657A1 | 024E0232G657A1 | 024E0233OM4 | |
| | MDC | 024A0246G657A1 | on request | 024A0247OM4 | on request | on request | on request | |
| Technical data | of connectors, fibers and | cables on request via the pr | oduct profile of your selecte | d trunks. | | | | |

Product information: Produktinfo_PreCONNECT_STANDARD_oe_013

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 ODF LARO panels.

| Channels/ Connectors on | | | epped "A length legs" AP and conventional | | With extended stepped "E length legs" compatible to ODF LARO panels | | | |
|-------------------------|------------|----------------|--|-------------|---|----------------|------------|--|
| Fibers | both sides | SM PC 0° | SM APC 8° | OM4 | SM PC 0° | SM APC 8° | OM4 | |
| | LCC | 024A0161G657A1 | on request | 024A0164OM4 | on request | on request | on request | |
| 32/64 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | 024A0256G657A1 | on request | 024A0248OM4 | on request | on request | on request | |
| | LCC | 024A0174G657A1 | 024A0176G657A1 | 024A0105OM4 | on request | on request | on request | |
| 36/72 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | on request | on request | on request | on request | on request | on request | |
| | LCC | 024A0106G657A1 | 024A0128G657A1 | 024A0107OM4 | 024E0106G657A1 | 024E0128G657A1 | 024E0107OM | |
| 48/96 | LCC-PPB | 024A0234G657A1 | 024A0235G657A1 | 024A0236OM4 | 024E0234G657A1 | 024E0235G657A1 | 024E0236OM | |
| | MDC | on request | on request | on request | on request | on request | on request | |
| | LCC | 024A0183G657A1 | on request | 024A0162OM4 | on request | on request | on request | |
| 64/128 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| | MDC | 024A0258G657A1 | on request | 024A0257OM4 | on request | on request | on request | |
| | LCC | 024A0108G657A1 | 024A0129G657A1 | 024A0109OM4 | 024E0108G657A1 | 024E0129G657A1 | 024E0109OM | |
| 72/144 | LCC-PPB | 024A0237G657A1 | 024A0238G657A1 | 024A0239OM4 | 024E0237G657A1 | 024E0238G657A1 | 024E0239OM | |
| | MDC | on request | on request | on request | on request | on request | on request | |

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 ODF LARO panels.

| Channels/ Connectors on | | | pped "A length legs" AP and conventional | | With extended stepped "E length legs" compatible to ODF LARO panels | | | |
|-------------------------|-----------------|----------------|---|-------------|---|----------------|-------------|--|
| Fibers | both sides | SM PC 0° | SM APC 8° | OM4 | SM PC 0° | SM APC 8° | OM4 | |
| 6/40 | SC-Duplex | on request | on request | on request | on request | on request | on request | |
| 6/12 | E-2000® Simplex | on request | on request | on request | on request | on request | on request | |
| 10/04 | SC-Duplex | 024A0179G657A1 | on request | 024A0178OM4 | 024E0179G657A1 | on request | 024E0178OM4 | |
| 12/24 | E-2000® Simplex | on request | on request | on request | on request | on request | on request | |
| 04/40 | SC-Duplex | 024A0147G657A1 | 024A0177G657A1 | 024A0169OM4 | 024E0147G657A1 | 024E0177G657A1 | 024E0169OM4 | |
| 24/48 | E-2000® Simplex | on request | 024A0149G657A1 | on request | on request | 024E0149G657A1 | on request | |
| 48/96 | SC-Duplex | on request | on request | on request | on request | on request | on request | |
| 40/90 | E-2000® Simplex | on request | on request | on request | on request | on request | on request | |
| 70/144 | SC-Duplex | on request | on request | on request | on request | on request | on request | |
| 72/144 | 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 or Cca dependent on stock:







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

| Channels/ Connectors | | | pped "A length legs" AP and conventional | | With extended stepped "E length legs" compatible to ODF LARO panels | | | |
|----------------------|-----------------|----------------|---|-------------|---|----------------|-------------|--|
| Fibers | both sides | SM PC 0° | SM APC 8° | OM4 | SM PC 0° | SM APC 8° | OM4 | |
| | LCC | 031A1800G657A1 | 031A1831G657A1 | 031A1810OM4 | 031E1800G657A1 | 031E1831G657A1 | 031E1810OM4 | |
| 6/12 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 6/12 | SC-Duplex | 031A1504G657A1 | on request | 031A1604OM4 | 031E1504G657A1 | on request | 031E1604OM4 | |
| | E-2000® Simplex | on request | 031A1013G657A1 | on request | on request | 031E1013G657A1 | on request | |
| | LCC | 031A1801G657A1 | 031A1808G657A1 | 031A1811OM4 | 031E1801G657A1 | 031E1808G657A1 | 031E1811OM4 | |
| 40/04 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 12/24 | SC-Duplex | 031A1506G657A1 | on request | 031A1606OM4 | 031E1506G657A1 | on request | 031E1606OM4 | |
| | E-2000® Simplex | on request | 031A1015G657A1 | on request | on request | 031E1015G657A1 | on request | |
| | LCC | 031A1803G657A1 | 031A1807G657A1 | 031A1813OM4 | 031E1803G657A1 | 031E1807G657A1 | 031E1813OM4 | |
| 24/48 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 24/48 | SC-Duplex | 031A1508G657A1 | on request | 031A1608OM4 | 031E1508G657A1 | on request | 031E1608OM4 | |
| | E-2000® Simplex | on request | 031A1016G657A1 | on request | on request | 031E1016G657A1 | on request | |
| | LCC | 031A1805G657A1 | on request | 031A1815OM4 | 031E1805G657A1 | on request | 031E1815OM4 | |
| 40/00 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 48/96 | SC-Duplex | 031A1511G657A1 | on request | 031A1611OM4 | 031E1511G657A1 | on request | 031E1611OM4 | |
| | E-2000® Simplex | on request | 031A1009G657A1 | on request | on request | 031E1009G657A1 | on request | |
| | LCC | 031A1806G657A1 | on request | 031A1816OM4 | 031E1806G657A1 | on request | 031E1816OM4 | |
| 70/444 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 72/144 | 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 ODF LARO panels.

| Chan- nels/ | Connectors on both sides | | pped "A length legs" AP and conventional | | With extended stepped "E length legs" compatible to ODF LARO panels | | | |
|----------------|-----------------------------|----------------|---|-------------|---|----------------|-------------|--|
| Fibers | both sides | SM PC 0° | SM APC 8° | OM4 | SM PC 0° | SM APC 8° | OM4 | |
| | LCC | 010A2079G657A1 | on request | 010A2080OM4 | 010E2079G657A1 | on request | 010E2080OM4 | |
| 6/12 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 0/12 | SC-Duplex | 010A1504G657A1 | on request | 010A1604OM4 | 010E1504G657A1 | on request | 010E1604OM4 | |
| | E-2000® Simplex | on request | 010A1013G657A1 | on request | on request | 010E1013G657A1 | on request | |
| | LCC | 010A2077G657A1 | on request | 010A2078OM4 | 010E2077G657A1 | on request | 010E2078OM4 | |
| 12/24 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 12/24 | SC-Duplex | 010A1506G657A1 | on request | 010A1606OM4 | 010E1506G657A1 | on request | 010E1606OM4 | |
| | E-2000 [®] Simplex | on request | 010A1015G657A1 | on request | on request | 010E1015G657A1 | on request | |
| | LCC | 010A1801G657A1 | on request | 010A1813OM4 | 010E1801G657A1 | on request | 010E1813OM4 | |
| 24/48 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 24/40 | SC-Duplex | 010A1508G657A1 | on request | 010A1608OM4 | 010E1508G657A1 | on request | 010E1608OM4 | |
| | E-2000® Simplex | on request | 010A1016G657A1 | on request | on request | 010E1016G657A1 | on request | |
| | LCC | 010A2075G657A1 | on request | 010A2076OM4 | 010E2075G657A1 | on request | 010E2076OM4 | |
| 40/00 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 48/96 | 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 | |
| | LCC | 010A1806G657A1 | on request | 010A1816OM4 | 010E1806G657A1 | on request | 010E1816OM4 | |
| 70/444 | LCC-PPB | on request | on request | on request | on request | on request | on request | |
| 72/144 | 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 | |

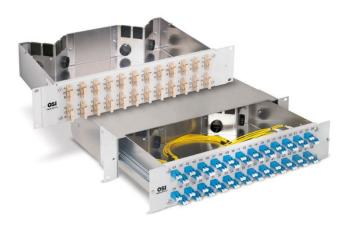
PreCONNECT® 19" 1 and 2 HU conventional distribution panels:

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 | | Fixed in | stallation | Telescopic co | omplete 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)

| Fait iiuii | ibers 2 110 KAL 7033 (light gray) | | | | |
|------------|-----------------------------------|----------|-------------|----------|-------------|
| | LC-Duplex PC 0° | 235A1287 | 235A1317OM4 | 234A1287 | 234A1317OM4 |
| 24/48 | SC-Duplex plastic PC 0° | 235A0180 | 235A0400OM4 | 234A0180 | 234A0400OM4 |
| 24/40 | 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 | 4 |
| Tertiary cable support large with brush | 1 pcs. | 111A0611 | Meri |
| 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:

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

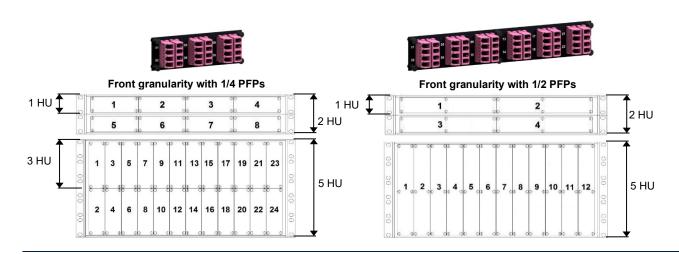
Part numbers:

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 type | | | |
| 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 factory assembled with part front plates in | | | | |

1 HU 1/4 PFP 6 LC-Duplex

our product information SMAP-G2 SD.



our product information SMAP-G2 SD.

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



1 HU 1/4 PFP 6 SC-Duplex

1 HU 1/4 Blind PFP



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 blace | k | | | |
| 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 | | | | |

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



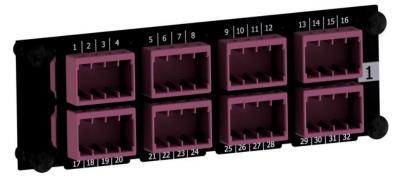
SMAP-G2 SD.

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

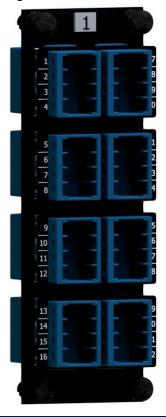
| Part numbers RAL9005 black | | | | |
|--|----------------|------------|-------------|--|
| Number of | for fiber type | | | |
| | SM PC 0° | SM APC 8° | OM4 | |
| adapter type/fibers | blue | green | violet | |
| 8 MDC4 / 64F numbering readable at horizontal mounting | 170A0005 | on request | 170A0006OM4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

MEGA HIGH DENSITY (MHD) with MDC

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 | | | |
| Number of adapter type/fibers | SM PC 0° | SM APC 8° | OM4 | |
| adapter type/fibers | blue | green | 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 plate | | | | |



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

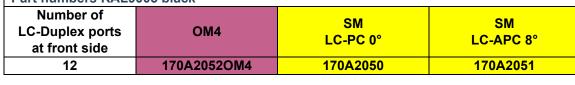


SMAP-G2 SD 24 fibers trunk module:

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 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 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 |

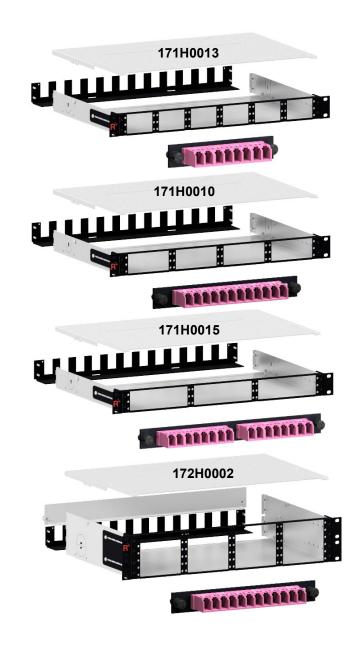
Find panels with other back plane configurations and further information in our product information SMAP-G2 HD.

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 | 170H0002 | | |
| 1/3 110 1/6 | 4 LC-Duplex (1 LC8) / 8F | 170H2100 | 170H2101 | 170H2102OM4 |
| 1/3 HU 1/4 | Blind PFP | 170H0001 | | |
| 1/3 110 1/4 | 6 LC-Duplex (1 LC12) / 12F | 170H2000 | 170H2001 | 170H2002OM4 |
| 1/3 HU 1/3 | Blind PFP | | 170H00 | 03 |
| 1/3 110 1/3 | 8 LC-Duplex (2 LC8) / 16F | 170H2202 | 170H2203 | 170H2002OM4 |
| Find part numbers for papels 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 HD.

1HU front granularity 6/6 width partition

| | grandanty o, o trialin 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



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 |

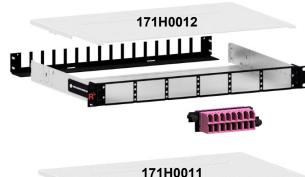
Find panels with other back plane configurations and further information in our product information SMAP-G2 UHD.

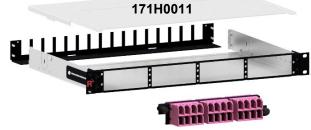
SMAP-G2 UHD panels are not appropriate for PURE trunks.

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 10 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 | | | | | |

1HU front granularity 6/6 width partition

information SMAP-G2 UHD.

| The none grandality of Water partition | | | | | |
|--|---|---|---|----|----|
| 1 | 3 | 5 | 7 | 9 | 11 |
| 2 | 4 | 6 | 8 | 10 | 12 |

| 1HU | front granularit | y 4/4 width pai | tition |
|-----|------------------|-----------------|--------|
| 1 | 3 | 5 | 7 |

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





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

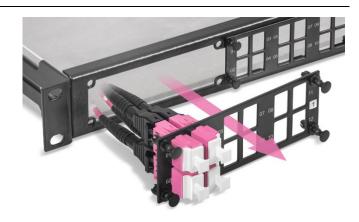




SMAP-G2 SD PURE 19" distribution panels empty:

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





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

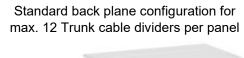








| PFP type / number of adapter slots SMAP-G2 PURE part-front-plate | | |
|--|------------------|--|
| | without adapters | |
| 1/4 blind-PFP | 170A0001P | |
| 1/2 blind-PFP | 170A0002P | |
| 1/4 / 12 LC-Duplex | 170A0130P | |
| 1/2 / 24 LC-Duplex | 170A0170P | |





Patchcords:

Properties:

- Kink and crush resistance optimized for environmental conditions
 Operating temperature range: -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 https://www.rosenberger.com/products/download-measurement-data/
- 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 | | | | | |
|---|---------------------------------|----------|-------------|----------------|----------------|
| Cable diameter | Connectors | Length | OM4 | OS2 PC 0° | 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 |
| 2.0 111111 | MDC » MDC | variable | 092A0004OM4 | 092A0003G657A1 | on request |
| | MDC » LC-COMPACT PPB | variable | 092A0008OM4 | 092A0007G657A1 | on request |
| 2.0 mm | LC-COMPACT » LC-COMPACT | variable | 087A6601OM4 | 087A6600G657A1 | 087A6609G657A1 |
| 2.8 mm | 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 |



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 | | | | |

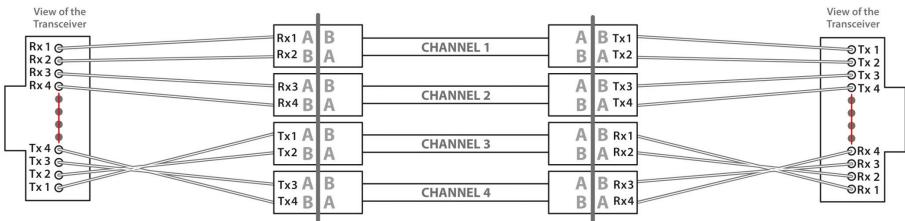
Migration of PreCONNECT® STANDARD to MTP®/MPO based parallel optics SR4 and PSM4 applications:

- 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:

| Part number | Pictures |
|---------------------------|---------------------------|
| RAL9005 black 099A0085 | |
| RAL9005 black 099A0065 | |
| | |
| | 099A0085 RAL9005 black |

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

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