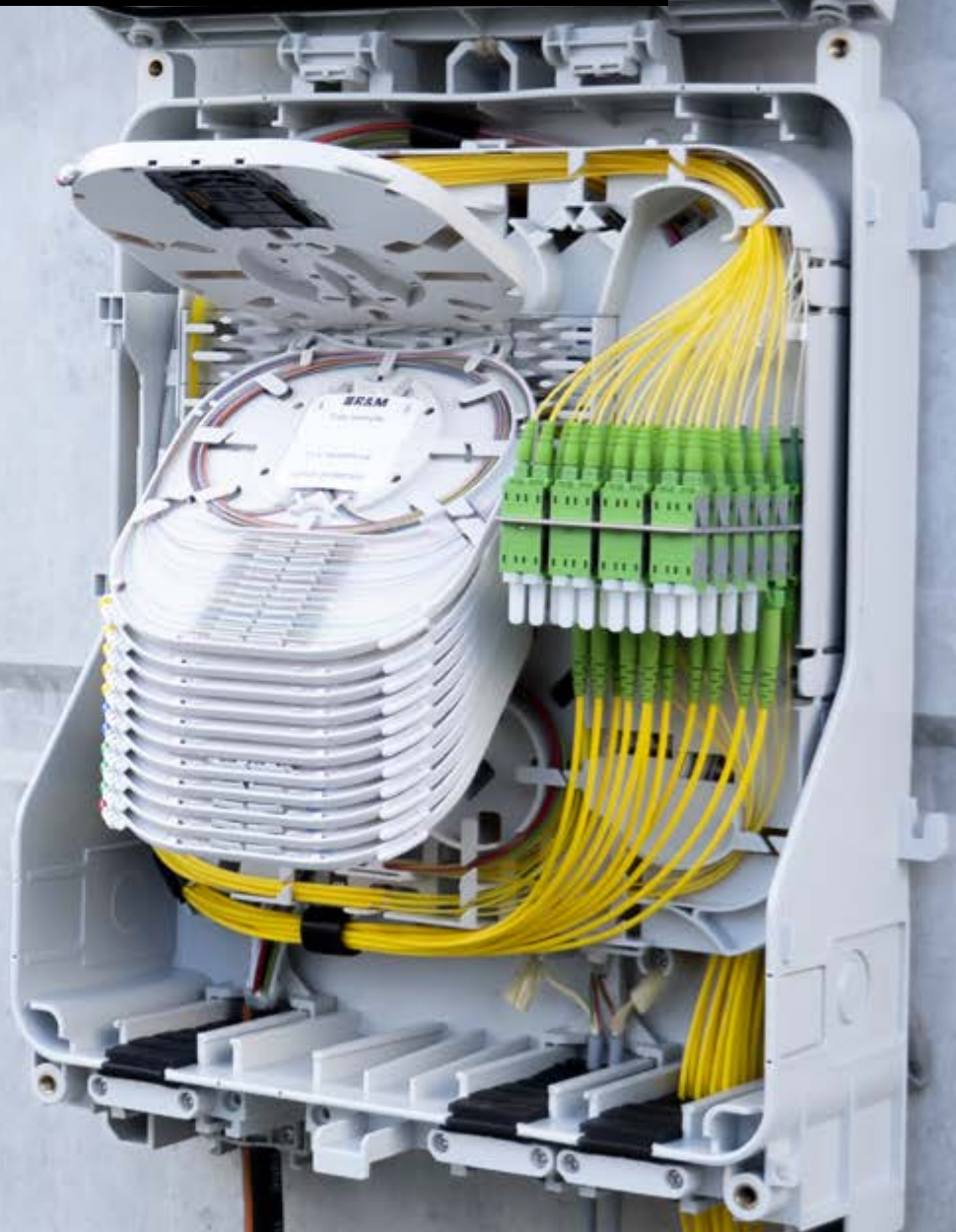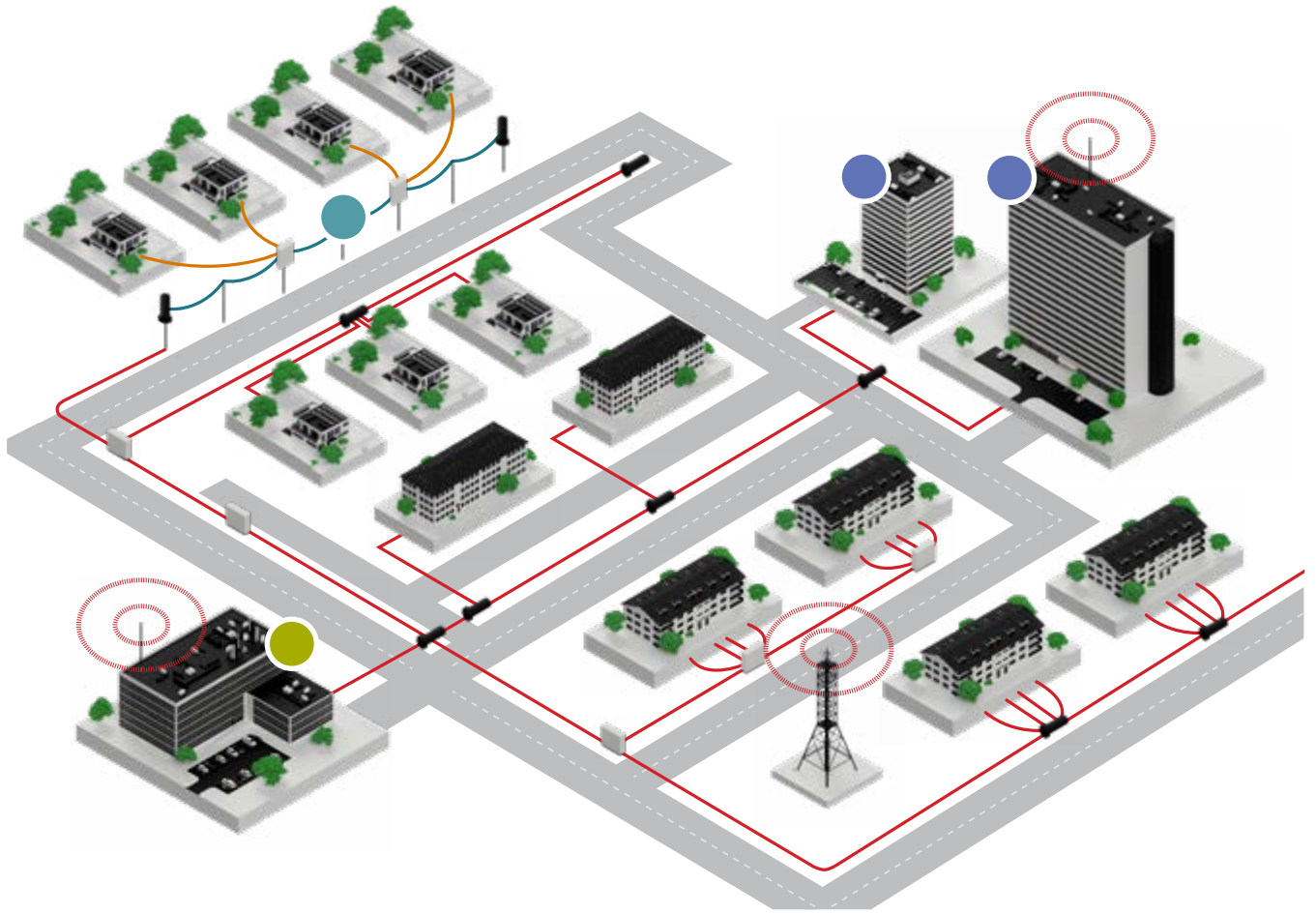# Polaris-box Family
Multifunctional for a flexible
fiber optic termination

R&M

R&M – Building FTTX Networks
For global customers in different industries

Central Office

Customer specific solutions for effective assembly, future-proof expansion and effective operation of optical or copper connectivity based distribution frames. Modular system elements complemented by professional planning consultancy.
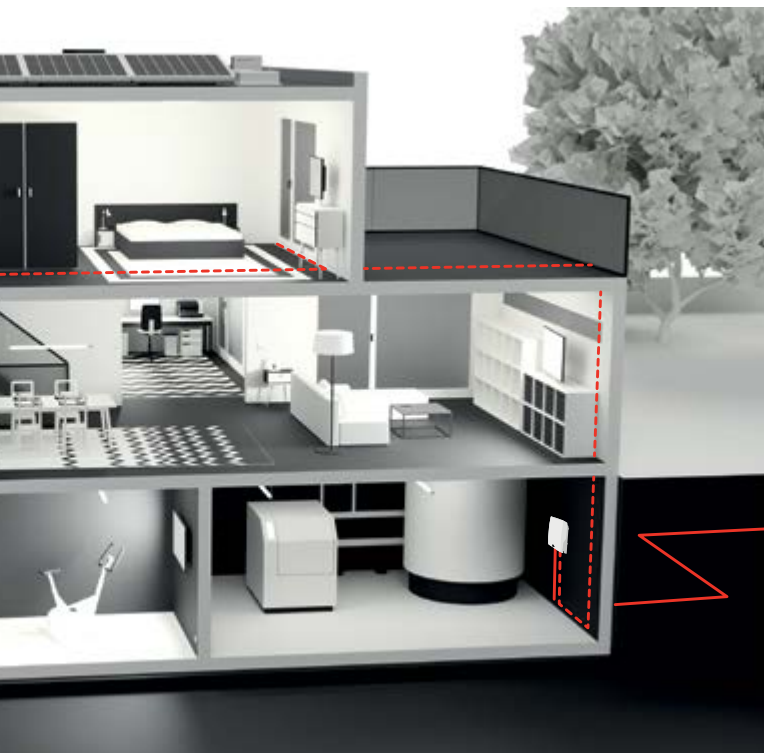
Outside Plant

Complete portfolio of robust street cabins, underground closures and distribution boxes offering latest technology in fiber connectivity and management. The different product platforms support all common cable types and fiber optical network topologies.

Customer Premises, Buildings and Cell Sites

Efficient solutions for supplying different buildings and urban infrastructure with fiber optic connectivity. Building entry points inside and outside of the building, realized with Polaris-box family a compact, flexible and modular concept for fiber termination. Complemented by field deployable connectors as a modern alternative to fusion splicing. Fiber optic connection in no time.

Fiber optic termination housing

Single dwelling unit (SDU).

The Polaris-box family is the new generation of FO-boxes from R&M for a flexible fiber optic termination for indoor or outdoor applications. It extends R&M FTTH solutions in the customer connection segment and its area of application ranges from single-family homes to building complexes.

The new Polaris-boxes are real multifunctional. In buildings, Polaris-boxes are suitable for entry points (BEP), riser zones, floor distributors up to the Optical Termination Outlet (OTO). They support patch, splice and splitter configurations as well as flexible and individual assembly. The new boxes enable network operators to quickly bridge the last meters into the buildings. At the same time they secure options for the future.

Contents

Multi dwelling unit (MDU).

Polaris-box 4

The Polaris-box 4 is the smallest in the family and fits even into tiny spaces. The basic configuration with one fiber inlay supports up to 12 crimp (ANT) or shrink (HS) splice connections. It's hard to believe, but the box offers space for an additional fiber storage under the first insert. If required, a second fiber inlay can be retrofitted.

For plug connections, a coupling field for 2 or 4 SC, LC duplex or E-2000™ adapters is available.

1 Flexible assembly of splice trays for different applications

2 Direct access to the individual fibers, fiber protection through additional tray cover

3 Simple and reliable installation, strain-relief for cable and micro-ducts

030.6846

installation speed

flexibility: cable entries

overlength storage

flexibility: fiber management

splice capacity

dimensions capacity

R&M

030.6847

Fiber storage for loose tube.

030.6848
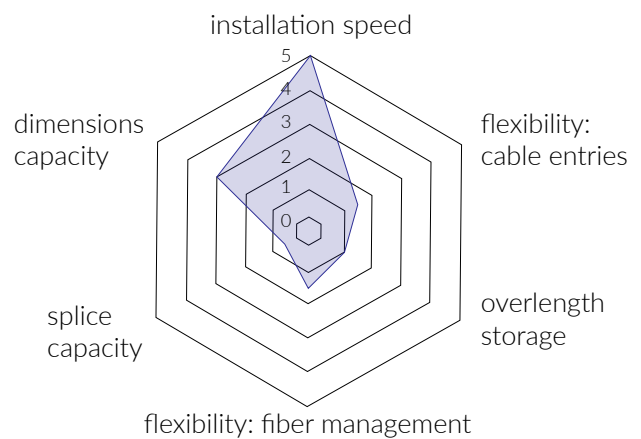
Simple and intuitive installation for a fast and secure migration.

030.6850

More safety through separate fiber routing of 900-um and 250-um fibers.

030.6849

Controlled bending radius. Access to individual fibers always guaranteed.

Get more

✓ For more safety: easy handling, optimal and stress-free fiber guidance.

✓ For more efficiency: uncomplicated cable migration, additional fiber storage and tool-free re-working.

✓ For more flexibility: compact design, variable configurations, up to 12/24 splices and 4/8 connectors
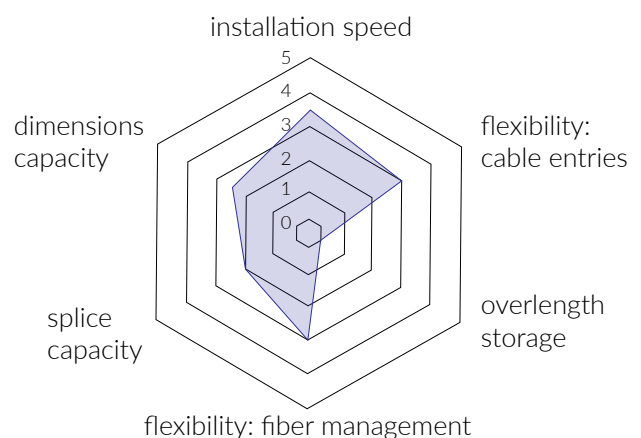
Polaris-box 6

The Polaris-box 6 is the little all-rounder. The optical distribution box is suitable for indoor and outdoor use. The basic equipment of the Polaris-box has a fully integrated fiber management. Up to 12 splice and 6 (12) plug connections with SC, E-2000™ and LC duplex (SFF) adapters can be implemented in the housing.

In addition, it is possible to supplement the box with a maximum of four additional 1TPU splice trays (4/12 fibers) or two 2TPU splitter trays. The Polaris-box 6 can be modularly re-equipped with up to 60 splice connections.

1 Direct access to individual fibers, fiber protection through additional tray cover

2 Simple and reliable installation, cable or micro-pipe strain relief

3 Flexible cable entries for different cables and micro tubes

030.6851

installation speed

flexibility: cable entries

overlength storage

flexibility: fiber management

splice capacity

dimensions capacity

R&M

030.6852

Cable entries on four sides and the rear
(OTO application).

030.6853

Multi-layer pre-cut cable sealing elements for easy cable migration.

030.6854

Access to adapters outside the housing, adapter field for two LC duplex, SC and E-2000™ connectors.

030.6855

Overlapping housing cover protects cable entries and external connectors.

Get more

☑ For more safety: unique sealing concept, high housing protection class IP65 and guaranteed minimum radius of 30 mm.

☑ For more flexibility: multifunctional platform, many retrofittable configurations, up to 60 splices and 6/12 connectors

☑ For more efficiency: fast, precise assembly, maintenance-friendly housing and tool-free handling.
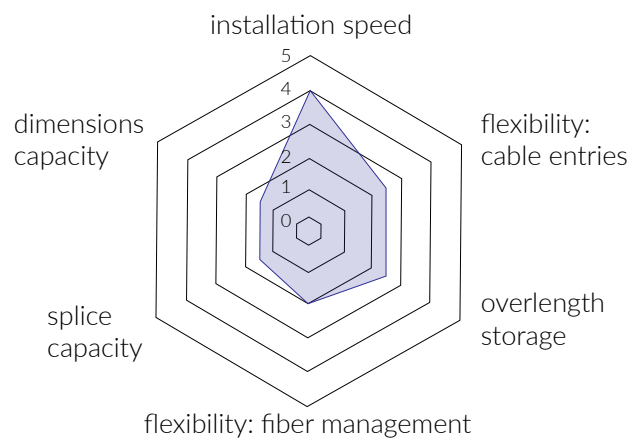
R&M

Polaris-box 16

The Polaris-box 16 is a compact distribution box with plenty of space for additional fiber storage. The swivelling fiber inlay separates the connectors from the splice connections; this guarantees greater safety for the fiber connections.

The bottom side can accommodate up to 24 splices and if required 3 splitters with a split ratio of 1:8 or 2:8. The top side offers space for 24 splices or 2 pre-assembled LGX splitter modules.
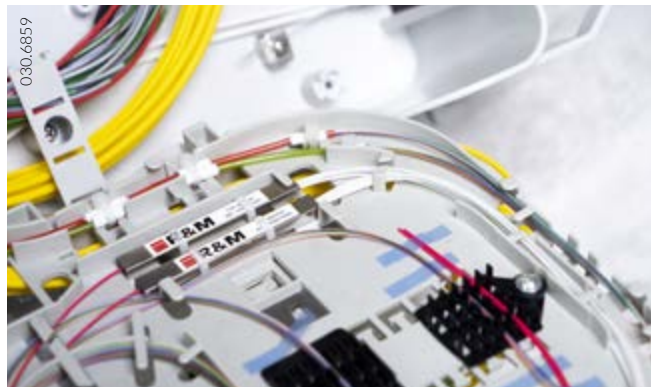

030.6480
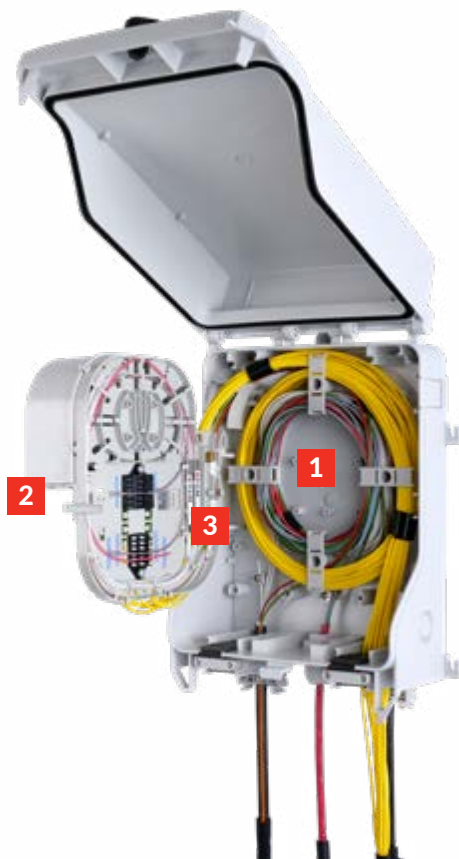
1 Sufficient space for secure fiber storage for loose tube and drop cables

2 Quick access to the connectors, protection for the fiber pigtail through the cover

3 Separate splicing area with optional space for splitter applications

installation speed

flexibility: cable entries

overlength storage

flexibility: fiber management

splice capacity

dimensions capacity

R&M

030.6858

030.6859

Cover for optimal protection of the pigtail fibers.

Position for fanout and bare fiber splitter applications.

030.6860

030.6861

Robust and flexible cable entries.

Easy identification and access to the connectors.

Get more

✓ For more security: separate sides for splice and patch connections, additional fiber protection through end caps and secure storage for bundled and drop cables.

✓ For more efficiency: compact and cost-optimized, pivoting fiber inlay and user-friendly design.

✓ For more flexibility: easy network migration, 2 retrofittable LGX splitter modules, up to 24 splices and 16/24 connectors
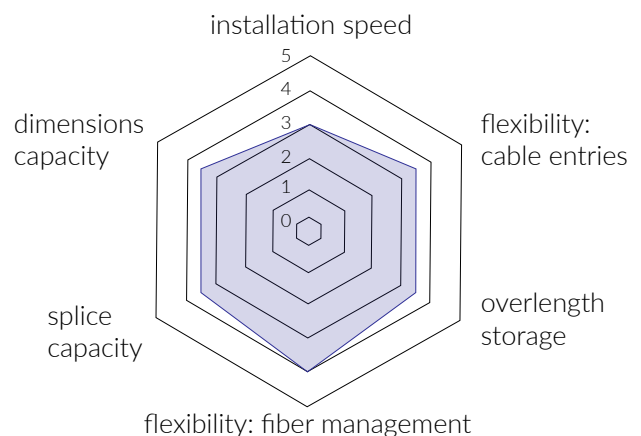
R&M

Polaris-box 24

The Polaris-box 24 is a versatile fiber optic termination box with a swivel-mounted fiber inlay. It offers space for 12 TPU (Tray Position Units), which can be individually equipped with splice or splitter trays.

With the new FMTS (Fiber Management Tray System) trays, subscribers or the required number of fibers can be securely managed. Up to 144 splices are possible when fully loaded with 12-fiber 1TPU splice trays. Up to 24 SC, E-2000™ or LC duplex adapters or 48 LC connectors are available. Thanks to the new sealing elements, up to 8 round cables or tubes with a diameter of 3 - 16 mm or a multiple of drop cables of 2 - 5 mm can be inserted into the box flexibly and without threading through a grommet.
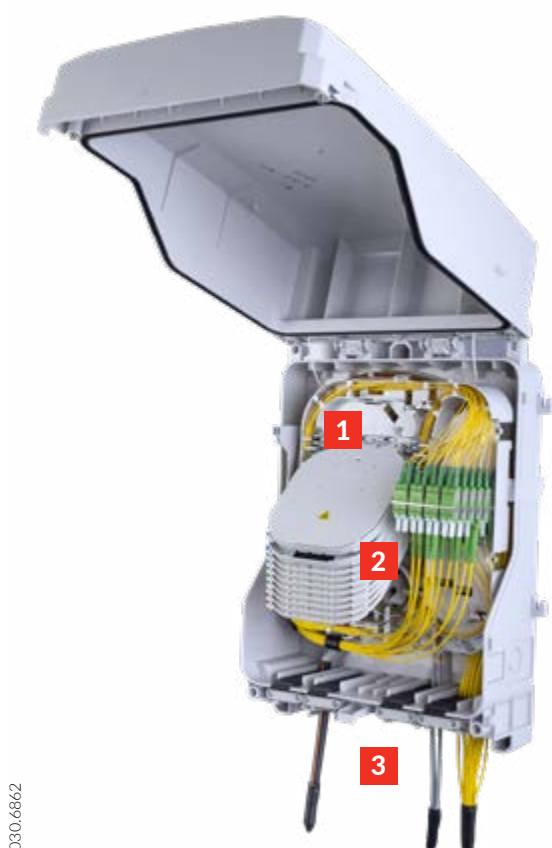
1 Splitter position for bare fiber splitter

2 Separate area for splices and connectors

3 Four cable ducts for flexible assembly of the sealing elements

030.6862

installation speed

flexibility: cable entries

overlength storage

flexibility: fiber management

splice capacity

dimensions capacity

R&M

030.6863

Swivelling fiber inlay for safe separation of incoming and outgoing fibers

030.6864

Ample space for generous bundle and drop cable storage

030.6865

Unique concept for flexible cable entries and robust support of cables and support elements

030.6866

Safe laying of the fibers with gentle bending radius

Get more

☑ For more security: simple assignment of fibers and subscribers, separation between splicing, patching and splitting applications and clear assignment of fiber paths.

☑ For more flexibility: fast network expansion, variable assembly of 1TPU/2TPU trays up to 144 splices and 24/48 (LC) connectors.

☑ For more efficiency: generous fiber storage, compact design and optimal operability.
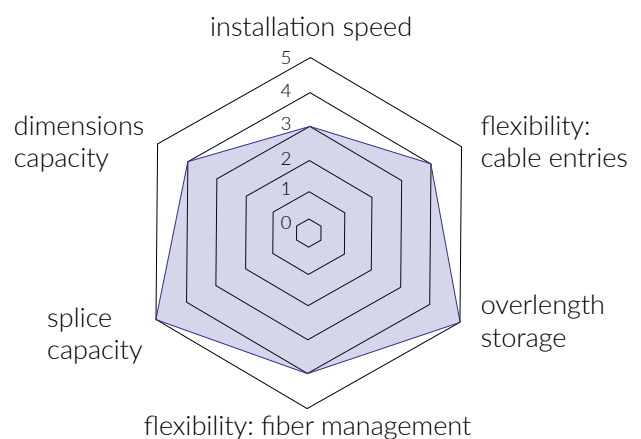
Polaris-box 36

The robust and highly compressed Polaris-box 36 is multifunctional. The top side of the fiber inlay has two separate areas for splice and plug connections. On the left side up to 24 FMTS cassettes can be equipped with splice or splitter trays. A maximum of 288 splices can be realized with the 12-fiber 1TPU splice cassette when fully equipped.

The right side is reserved for adapters/pigtail, drop and patch cable connections; up to 36 SC, E-2000™ or LC duplex means 72 connections can be realized. In order to cope with these fiber quantities, 6 break-out slots can be equipped with the new pre-slotted sealing elements in a customer-specific and modular way. Up to 12 cables or tubes up to 16 mm diameter or 144 subscriber or drop cables with 2 – 3 mm diameter can be inserted.
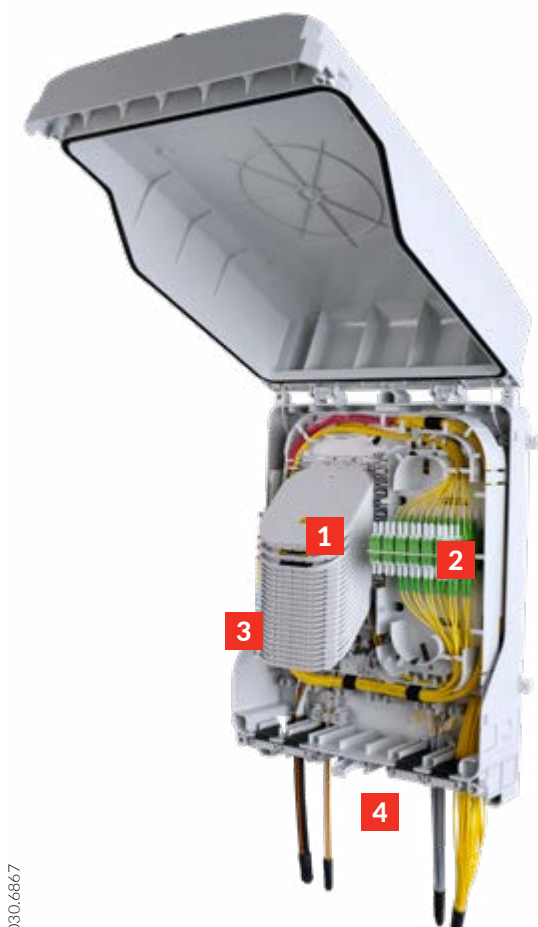
1 Tray support for fast and flexible assembly of 1TPU or 2TPU FMTS cassettes

2 Highly compact coupling field with direct access to the connectors

3 Guaranteed access to individual fibers, well protected in the FMTS tray system

4 Flexible break-out cable entry slots allow an expansion or extension according to requirements

030.6867

installation speed

flexibility: cable entries

overlength storage

flexibility: fiber management

splice capacity

dimensions capacity

R&M

030.6868

Clear separation between splice and patch area guarantees optimal management of fiber connections.

030.6869

Highest flexibility for cable and tube feeding

030.6870

Protected area for up to 9 fanout splitters 1:8 on the underside of the fiber inlay.

030.6871

Safe laying of the fibers with gentle bending radius. Access to individual fibers is always guaranteed.

Get more

☑ For more security: customer-oriented subscriber assignment, clear separation between splice and patch areas as well as optimal fiber protection with FMTS trays.

☑ For more efficiency: integrated storage for loose tubes, highly compact adapter field and guaranteed access to individual fibers.

☑ For more flexibility: flexible cable entry and expandability, up to 24 FMTS cassettes, up to 288 splices and 36/72 (LC) connectors.

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R&M – the Polaris-box family overview

	Polaris-box 4	Polaris-box 6	Polaris-box 16
Protection class	IP65	IP65	IP65
Number of adapters LC, SC, LC-Duplex	2/4	6	16/24
Number of splices	12 … 24	12 … 60	12 … 24
Number of FMTS trays	–	4	–
Number of splices FMTS	–	4/12	–
Number of cable inserts top/side	2 only side entries	2/2	2/2
Number of cable inserts below	2	4	4
Main cable inserts	1 x R 3 – 13 mm	1 x R 3 – 13 mm	1 x R 3 – 16 mm
Drop cable inserts, round	12 x R 2 – 3 mm	12 x R 2 – 3 mm	16 x R 2 – 3 mm
Drop cable inserts, Butterfly	–	–	16 x 2 – 3 mm
Drop cable inserts	8 x 4 – 5 mm (IP55 only)	8 x 4 – 5 mm (IP55 only)	4 x 4 – 5 mm
Overlength storage	●●●	–	●●●●●
Extendability	●●●	●●●	●●●
Splitter application	●●●	●●●	●●●●●
Collocation	●●●●●	●●●●●	●●●●●
Size	compact	small	small/medium

R&M

Polaris-box 24   # Polaris-box 36

Polaris-box 24	Polaris-box 36
IP65	IP65
24	36
12 … 144	12 … 288
12	24
4/12	4/12
2/2	2/2
8	12
1 x R 3 – 16 mm	1 x R 3 – 16 mm
16 x R 2 – 3 mm	16 x R 2 – 3 mm
16 x 2 – 3 mm	16 x 2 – 3 mm
4 x 4 – 5 mm	4 x 4 – 5 mm
●●●●●	●●●●●
●●●●●	●●●●●
●●●●●	●●●●●
●●●●●	●●●●●
medium	medium/large
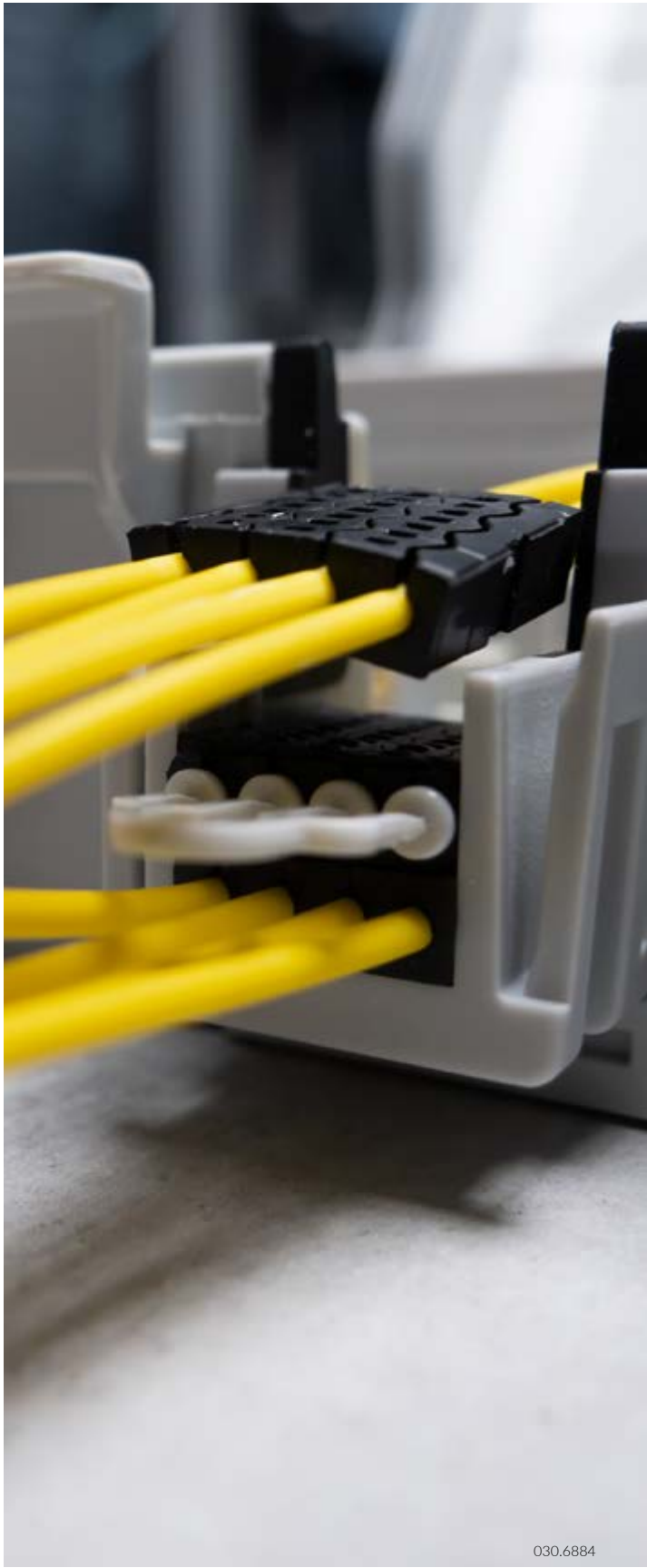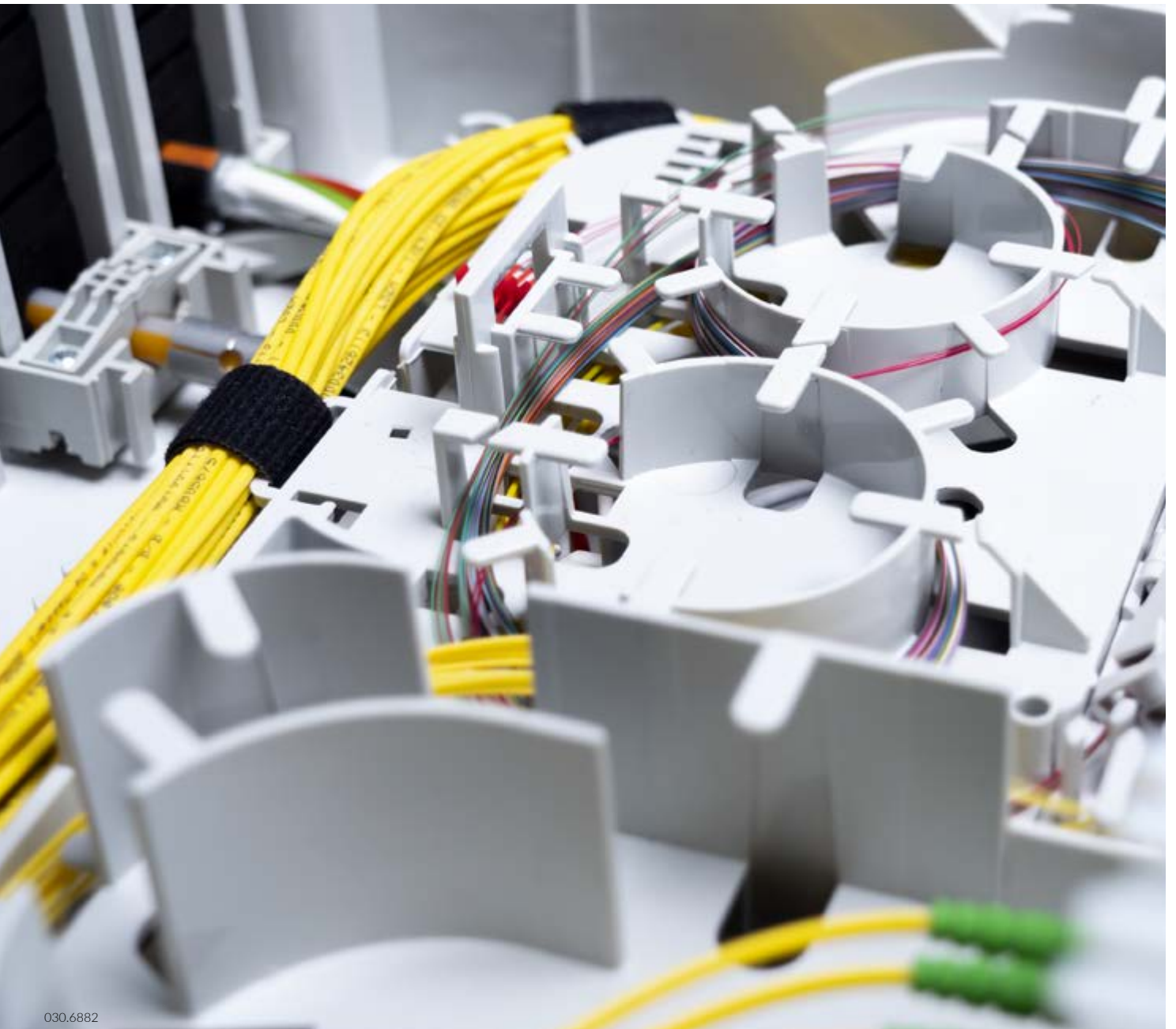
030.6884

030.6882

«R&M products are stable, user-friendly and of premium quality.»

Felix Neukom, Head of FO, Instakom AG

R&M

FTTX Portfolio

Buildings

041.0496
Indoor FO Cable

030.5603
Fast Reel Outlet Box

030.7140
Connectivity

090.7237
Optical Distribution Frames

090.7109

Polaris-box Family:
Outdoor & Indoor
Distribution
Termination
Building Entry Point

Outside Plant

090.7531
Mechanical Gel sealed SYNO Closures

030.6427
Heat-shrink Dome Closures

030.6385
Heat-shrink Dome Closure Flex

090.7057
Customized Street Cabinets

Central Office

090.5389
Raceway

090.2779
3U-Modules

090.2537
19" Panels

090.5622
Cable Assemblies

Cabling solutions with added value. That is what R&M (Reichle & De-Massari AG) stands for. This is the added value customers experience during the effortless installation of R&M cables and over several generations of use without interruption.

Since 1964, R&M has been developing and producing exclusively high-quality and future-proof connecting and distributive technology. As an independent Swiss family company, R&M is one of the world's leading suppliers of innovative cabling systems for data and communication networks.

Thanks to the innovative strength of the company, R&M now covers the entire range of copper-based and fiber optic connectivity. R&M systems can be used in telecom networks, Fiber to the Home projects, data centers and local data networks of utilities, municipalities, hospitals, or enterprise and campus network applications. Software for network management rounds out the portfolio.

The cabling solutions are tailored precisely to user requirements. Clients who opt for R&M invest in sustainably reliable, scalable and migration-capable infrastructures. The result: Networks with guaranteed, measurably superior performance.

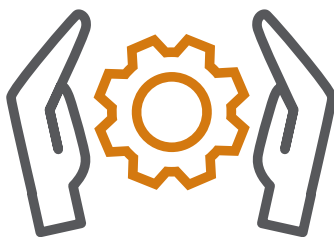### Quality
Every bits reaches its goal.
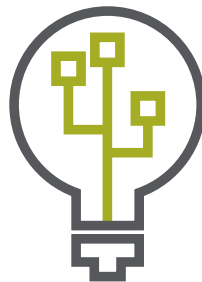
Innovation
Excellent and effortless wiring.

Consultancy
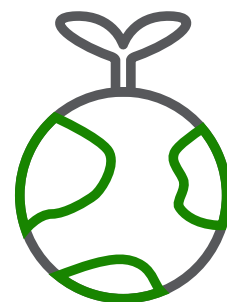International project expertise and reliable advice.

Protection of investment
Install just once and enjoy permanent use.

Customer focus
Responsible experts on site.

Sustainability
People, nature and the market in harmony.

Project success is determined by the network of the project partners. Best data and communication networks are the result of good collaboration.

R&M offers professional technical consultancy for system integrators, planning engineers and installers at the early stage of a infrastructure project. The subsequent support ranges from the design through evaluation, configuration, customizing, logistics and installation training through to the actual commissioning of the network.

The global R&M network comprises proprietary sales offices, production plants and warehouses as well as certified distributors and partners. R&M products are available locally to partners and customers in more than 100 countries.

Lead: R&M makes partners insiders

In practice-oriented workshops planners, distributors, project managers and installers gain insider knowledge about future technologies, trends and standards and have the opportunity to exchange experiences with R&M experts.

Success: Meaningful case study publications

R&M continuously documents reference projects in meaningful reports. The case studies developed together with partners and customers provide valuable insights into network technology.

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O /reichledemassari

f @reichledemassari

▶ /ReichleDeMassariAG

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