# FiTH Fiber-in-The-Home

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As buildings and households are increasingly being wired with optical fibres, broadband connections are even today becoming a reality for all users. Bandwidthintensive applications such as high-definition television or high-speed Internet have thus ceased to be mere visions.

New, revolutionary fibre types enable easy optical fibre installation inside buildings and residential dwellings without requiring bending radii to be taken into account. The installation of these new cable types in empty pipe systems or surface mounting even under difficult conditions has thus been transformed into an easy and reliable matter.



## OptiBox 4

The OptiBox 4 is an optical fibre distribution and termination housing which is used for splicing, patching and incorporation of passive optical components. The installation-friendly housing is typically used in FTTH/FiTH applications and has been designed for indoor or outdoor wall mounting.

It is possible to fasten conventional multifibre loose tube cables as well as microcables or blow-installation tubes inside the housing. The optical fibres are fully protected against mechanical action and environmental influences. Different MicroDuct blow-installation systems established in the market as well as HUBER+SUHNER MASTERLINE quick and MASTERLINE push-fit cable systems are also easily and reliably fixed in place inside the OptiBox.

## Optical connectors

Per OptiBox 4, it is possible to incorporate up to four standard optical adapters of types

- SC- or E-2000<sup>™</sup>-Simplex or
- LC- and LX.5-Duplex (flangeless)

Two integrated coupling fields are available for internal and external patching.



## Preassembled cable systems

SMARTLINE breakout is the ideal OptiBox supplement when it comes to ensuring fast indoor plug & play cabling. Bending-radius-insensitive fibres guarantee easy installation with small bending radii. The cable system with 4, 8, 12 and 16 fibres is factory-assembled with connectors.

MASTERLINE quick for fast on-site self-assembly. The OptiBox 4 is specially prepared for receiving the newly designed MASTERLINE quick cable devider. Available for 2 to 12 fibres.



## Patchcords, bending radii

Simplex LowBend patch cords for connecting the OptiBox to the Customer Premises Equipment (CPE) are available in various lengths. Using standardised fibres to ITU G.657 A, it is possible to maintain inimum bending radii.

# MicroDuct applications

New, innovative Fiber-To-The-Home MicroDuct blowinstallation systems are as much taken into account by the novel OptiBox 4 housing as conventional cable installation technologies.

All commercially available gas and water blockers can be terminated inside the OptiBox 4.







New installation cables with reduced bending radii (LowBend) to standard ITU G.657 A with 2 to 4 fibres allow reliable and easy installation.



### LowBend installation cables

- Metal-free indoor and outdoor cables
- Strain relief with aramid yarn
- For direct connector assembly
- Narrow bending radii
- Halogen-free and no corrosive combustion gases
- With a higher number of fibres, we recommend the use of LowBend breakout cables.
- Available with 4, 8, 12 and 16 fibres.

## OptiBox 4 housing accessories

Accessories carefully matched to the OptiBox 4 complete the extensive HUBER+SUHNER Fiber-in-The-Home range of products.

Splice protection holders for sandwich or heat shrink splice protectors plus the optional closing system that is retrofitted or factory-assembled make the OptiBox a top-grade customer termination.

For mounting on poles or antennas, a mounting set is additionally available.



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## Optical connectors

Per OptiBox 4, it is possible to incorporate up to four standard optical adapters of types

- SC- or E-2000<sup>™</sup>-Simplex or
- LC- and LX.5-Duplex (flangeless)

When duplex adapters are used, this provides a possibility for using a maximum of 8 detachable LC or LX.5 connectors.



# Preassembled cable systems

#### SMARTLINE

SMARTLINE breakout is the ideal OptiBox supplement when it comes to fast indoor plug & play cabling. Bendingradius-insensitive fibres guarantee easy installation with small bending radii. The cable system is factory-assembled with connectors at one or both ends. Available with 4, 8, 12 and 16 fibres.

#### MASTERLINE

Preassembled MASTERLINE quick cable system. Available as a kit for fast on-site assembly of multifibre loose tube cables on field-assembly optical connectors. Available with 2 to 12 fibres.

- Four different housing colours available
- Including 50cm tails for depositing excess fibre lengths inside the OptiBox4
- Ideal in combination with QuickAssembly QXA tool





## Patchcords, bending radii

Various connection cables designed for Fiber-in-The-Home applications with G.657 A fibres are available for selection.

- SC/APC on SC/APC, simplex 27H01CHG-LB-73/73-2-XX\* DD
- SC/PC on SC/PC, simplex 27H01CHG-LB-70/70-2-XX\* DD
- LC/APC on LC/APC, simplex 27H01CHG-LB-86/86-2-XX\* DD
- LC/PC on LC/PC, simplex 27H01CHG-LB-85/85-2-XX\* DD \*XX, connection length to be selected.

Additional patchcords upon request.

### LowBend - installation cables

#### Installation cables

2- to 4-fibre bending-radii-insensitive installation cables with fibres according ITU G.657 A are available for highly flexible installation inside buildings.

- 4 fibres SM, 4.8 mm outside Ø, grey 84063363 04-E9LB/FSN(ZN)H-H48
- 2 fibres SM, 4.8 mm outside Ø, grey 84060987 02-E9LB/FSN(ZN)H-H48
- 4 fibres SM, 2.8 mm outside Ø, grey 84067597 04-E9LB/V(ZN)H-H28

#### Breakout cables

With a higher number of fibres, we recommend the application of LowBend breakout cables

• 12 fibres SM, 12.0mm outside Ø, yellow 84073652 12-E9LB/CWJSNH-E20-FG

Additional breakout cables with 4.8 and 16 fibres upon request.

## OptiBox 4 housing accessories

#### Splice protection holders

- for 6x sandwich splice protection
  - 84004065 SPL-SCM-COMB-SW-06-A1 • for 3x heat shrink splice protection
  - 84004064 SPL-SCM-COMB-HS-06-A1

#### Splice protection

- 3x45mm, heat shrink splice protection 84005211 SPLPR-HS-45
- 1.2x3.2x30mm, sandwich splice protection 84005554 SPIPR-SW-30

#### Retrofit lock

• Lock including two keys, mounting clamp 84078461 OTB4-KEY-LOCK-RETRO-FIT-2233X



#### Pole mounting set

- Pole mounting set for pole ø max. 155 mm 84076034 OTB4i-POLE-MOUNT-SET-D155
- Pole mounting set for pole ø max. 500mm 84079219 OTB4i-POLE-MOUNT-SET-D500





