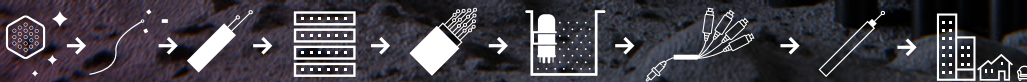


# Insight into

**FIBRAIN** 

**Products portfolio**



→ [www.fibrain.com](http://www.fibrain.com)

**4** manufacturing centres

**+80** countries

**+700** employees

**+100 000 000** connected people

**FIBRAIN** 



**Solid.  
Thoroughly tested.  
Made in Poland.**



# Proven scope of expertise on all fronts

FIBRAIN meets the **highest quality standards**, which prove **our certificates**.



ISO 14001:2004  
Certificate



ISO 9001:2015  
Certificate



ISO 45001:2018  
Certificate



NATO Commercial and  
Government Entity Code



AC 129  
QMS



CNBOP-PIB



## FIBRAIN people – the asset like no other

**A key element that has contributed to FIBRAIN success are our employees. FIBRAIN aims at creating the best working environment in which each employee feels valued. Our culture is based on mutual trust and true professionalism, respect and support within the team.**



„FIBRAIN gives me a lot of opportunities to develop my skills and widen my experience. Professional trainings equip me with essential knowledge which I can use while performing my duties”.

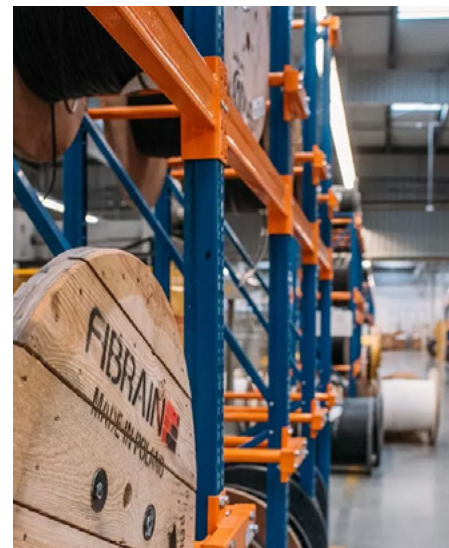


„I have been working in FIBRAIN for many years. This is my workplace where I feel valued and important”.

## Taking responsibility for the environment

**FIBRAIN protects ecosystems and natural resources, by taking wide range of actions and intensive efforts, such as:**

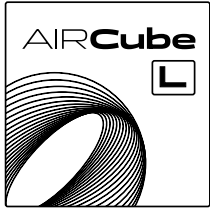
- minimizing pollution
- minimizing the production waste
- using materials and components that are not harmful to the environment
- recycling
- obeying implemented environmental management system ISO 14001: 2015



# Fiber Optic Cables

**FIBRAIN has one of the most modern and technologically advanced Optical Fiber and Fiber Optic Cable Manufacturing Centers in Europe.**

## Possibility of



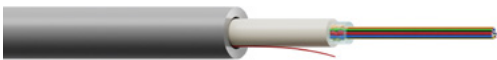
**packing system**



**+100 000 km  
cables per year**

**All cables in accordance  
with CPR Construction  
Product Regulation**

## DATA COM



**EXO-D0 up to 24F in 5.5mm**

Dca s2, d0, a1 class in accordance with CPR

Datcenter / Compact design / LS0H 🔥 / Basic Rodent Protection 🐭



**EXO-FD75 up to 24F in 7.2 mm**

B2ca/Cca s2, d0, a1 class in accordance with CPR

Datcenter / Compact design / LS0H 🔥 / Basic Rodent Protection 🐭



**DC-PRIM 12F in 3 mm**

Last mile indoor connection / LS0H 🔥 / Bendsafe / Easy to terminate / Datcenter / FTTH

## MICRODUCT



**MK-AX 1-12F 1.1-1.6 mm**

Microduct / FTTH / Last mile outdoor connection / Blowing installation / Low friction / High thermal stability / Compact design / Bendsafe

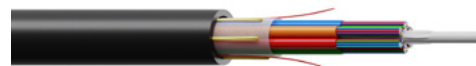
## AirReel



**MK-DXS16 2F 1.6 mm**

**MK-DXS25 2-24F in 2.5 mm**

Microduct / FTTH / Last mile outdoor connection / Blowing installation / Flexible / Compact design / Bendsafe



**MK-FM6 up to 72F in 6 mm, ESM®**

**MK-FM7 up to 96F in 6.3 mm, ESM®**

**MK-FM8 up to 144F in 7.9 mm, ESM®**

Microduct / Optimal diameter / Low friction / Telecom / Blowing installation / Easy Section Module®



**MK-LXS6 up to 72F in 5.3 mm**

**MK-LXS7 up to 96F in 6.2 mm**

**MK-LXS8 up to 144F in 7.8 mm**

Microduct / Optimal diameter / Low friction / Telecom / Blowing installation



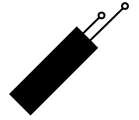
**MK-UX5 up to 144F in 5.9 mm**

**MK-UX6 up to 192F in 6.6 mm**

**MK-UX8 up to 288F in 7.9 mm**

Microduct / Optimal diameter / Low friction / Telecom / Blowing installation / 200 μm fibers

# Fiber Optic Cables

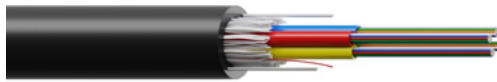


## TELECOM DUCT



### BDC-CI up to 432F, loose tubes

Telecom / Basic Rodent Protection / Duct



### MDC-FM up to 288F, ESM®

Telecom / Basic Rodent Protection / Duct / Easy Section Module®



### BDC-DX up to 864F in 21 mm

Telecom / Basic Rodent Protection / Duct

## TELECOM AERIAL



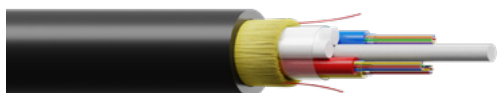
### AERO-DR03 1F, 3 mm, up to 55 m spans

FTTH / Last mile outdoor connection / Aerial / Telecom



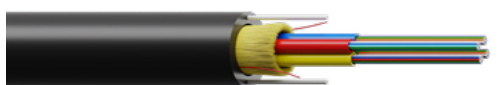
### AERO-DF03 2F-24F, up to 140 m spans

FTTH / Last mile outdoor connection / ADSS / Telecom



### AERO-AS 2kN-12kN, 80 m-700 m spans

Telecom / Aerial / FTTH



### MAR-FM 12F-288F, spans up to 80m, ESM®

Telecom / ADSS / FTTH / Easy Section Module®

## FTTH



### VC-D21, 30, 40, up to 4F, ESM®

Dca/Cca/B2ca in accordance with CPR Last mile indoor connection / LS0H / Bendsafe / Flexible / Easy to terminate / FTTH / Easy Section Module®



### EAC-RAM up to 144F, ESM®

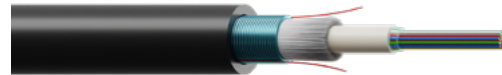
Last mile indoor connection / LS0H / Bendsafe / Flexible / Easy to terminate / FTTH



### BURRY-DAC-G 2F-24F

Direct buried / FTTH / Last mile outdoor connection / Hi-crush / Compact design

## ARMORED



### SSC-T30U 2F-24F in 7.6 mm

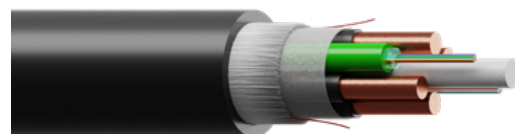
Telecom / High Rodent Protection / Duct / Direct buried



### DSC-CI 12F-144F, double sheath

Telecom / High Rodent Protection / Duct / Direct buried

## HYBRID POWER+FO



### BDC-DIP 2.5 mm<sup>2</sup> H07V-U

Telecom / Duct / Basic Rodent Protection / Hybrid F0+Power

OVER **3 000 000**  
CONNECTORS TERMINATED  
ANNUALLY

THE BIGGEST CONNECTIVITY  
MANUFACTURING CENTER  
IN EUROPE



## Pigtails & Patch cords

different type of connectors and fibers



Gold Grade



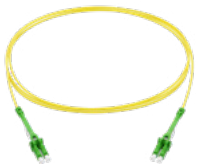
Titanium Grade



Cross-connect drop  
cable patch cords  
and pigtails



Invisible I-Drop patch  
cords



Uniboot



Push&Pull  
Duplex HD



Uniboot Push&Pull  
HD



Armored patch  
cords

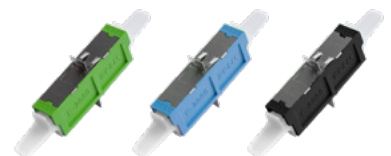
## Adapters



SC adapters



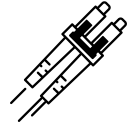
LC adapters



E2000 adapters



# Connectivity



## Launch fiber box & optical circuit simulator



OSC

LB3

Opti-CS

- 1 Connector type color code
- 2 Magnet mounting
- 3 Fiber color code
- 4 Shoulder strap
- 5 Compact housing

## Pre-connectorized cables & MTP/MPO Solution

Various cable types and connector combinations



TCF

PTF

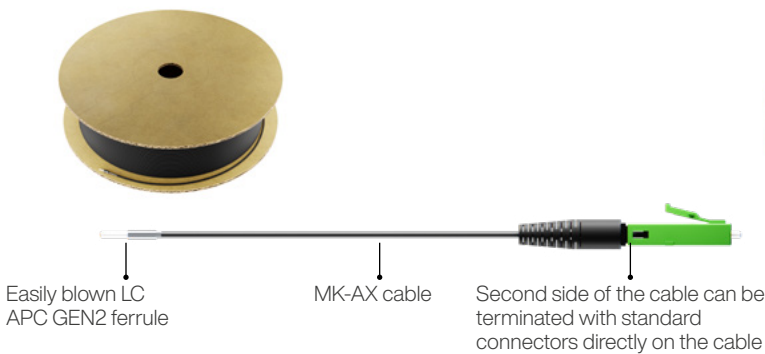
Armored

TEF

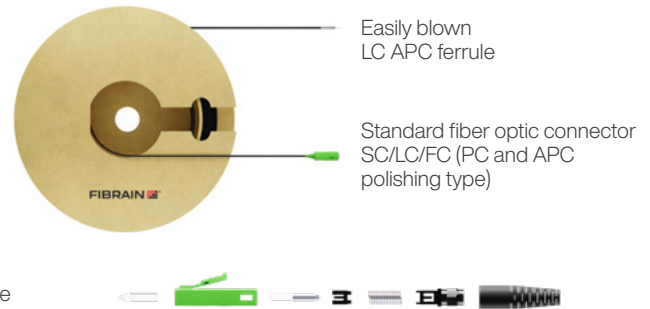
MPO

## Easily blown pre-connectorized GEN2 cable

Available connector: LC APC & LC PC



## LC APC Connector Kit for pre-connectorized MK-AX cable



## Pre-connectorized cable on the drum



VC-Dxx Drop Cable

Invisible I-Drop cable

Pre-connectorized cable with pulling eye

Rapid box set VC-Dxx cable terminated with VFTO box

## Field connectors





# EASILY PATENT PENDING PULLABLE PRE-CONNECTORIZED CABLE

Smart solution providing fast installation



## Key features



### Fast installation

cable kit ready for installation by pulling through the microducts or corrugated tubes



### Terminated with special ending for direct pulling

the plug protect the connector's body during pulling operation and allows to install cord



### Large pulling ranges

up to 100m



### High performance

high quality ferrule ensures best optical parameters



### Cost saving solution

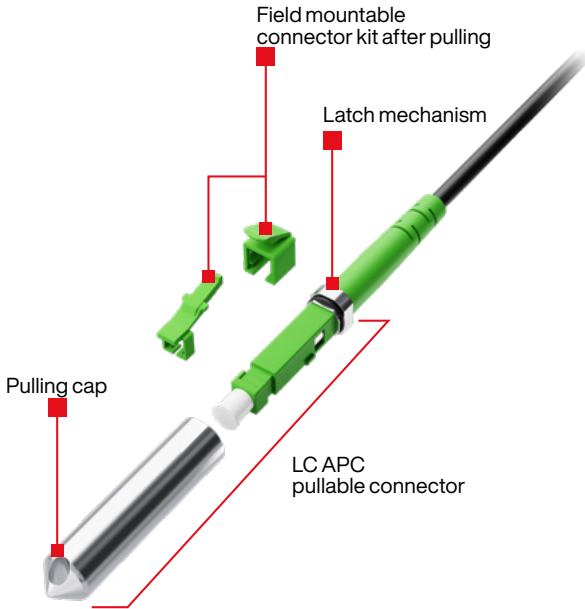
no need to install additional pulling eye. Removing the plug and equipping connector body with lever for LCA connector and housing for SCA connectors takes few second

# FIBRAIN EPP

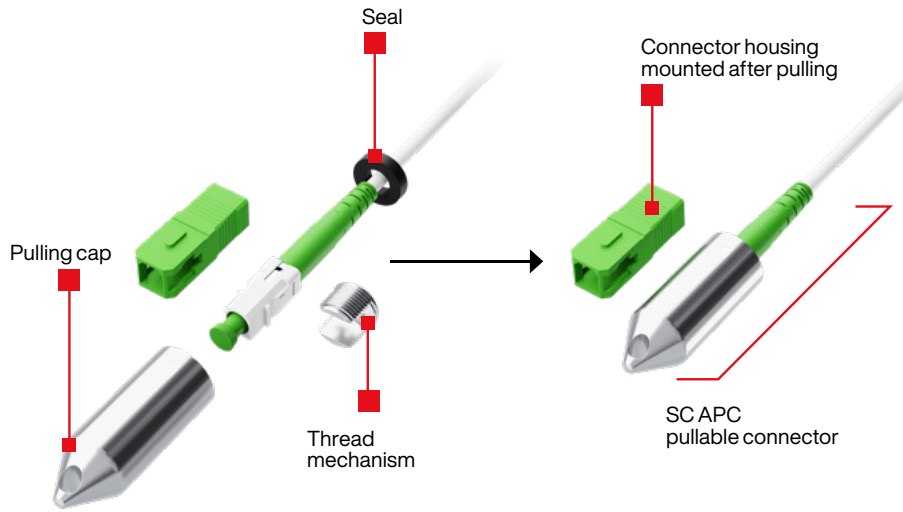


## Construction

### LC APC Connector



### SC APC Connector



## EPP cables



### VC-D30

FTTH Single Jacket LS0H ♦ Minibreakout – 1F 900µm – Drop Cable with Aramid Strength Members



### AERO-DR03

Last mile aerial cable with PUR sheath

## Fast installation in 4 easy steps



1 Unpack



2 Pull through the microduct/corrugated tube



3 Assemble the connector



4 Inspect & connect

## Tube compatibility

| CONNECTOR | INSTALLATION          | PULLING RANGE |
|-----------|-----------------------|---------------|
| LC APC    | Micropipe 12/8        | 100m          |
| SC APC    | Corrugated tube 20/16 | 100m          |

# EASILY BLOWN PRE-CONNECTORIZED MK-AX CABLE GEN2



FIBRAIN's EBP last mile preterminated drop cable solution is designed to be blown through microducts in FTTH networks.

The solution is based on a ready-made pre-connectorized cable kit.

Unpack, blow into the microduct, assemble the connector housing, connect and inspect.



## Key features



### Fast installation

ready for installation by air-blowing cable kit



### Terminated with special LC APC ferrule

protected with dust cup during installation



### Large blowing ranges

even over 1000m



### Cost saving solution

eliminates the need for splicing connections – no need to use costly splicing machines and operators at the premises



### High performance

high quality ferrule achieves and maintains B grade – ensures best optical parameters

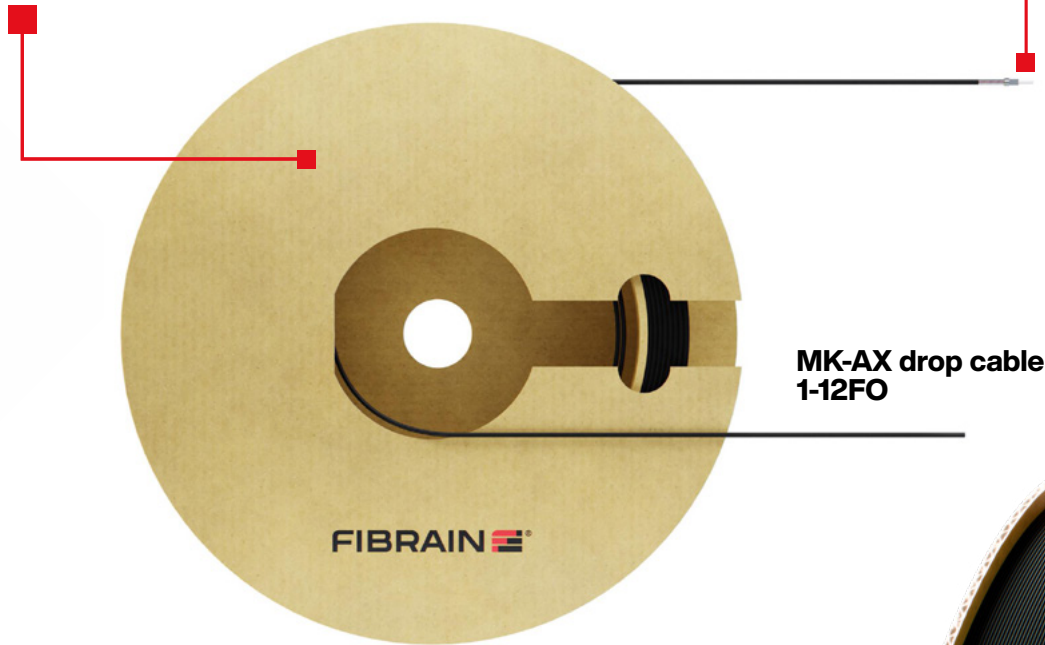
# FIBRAIN EBP GEN2



## Construction

Customized cable length –  
from 25 m up to 1000 m

LC APC  
Easily Blown Ferrule



MK-AX drop cable  
1-12FO



## FIBRAIN MK-AX Cable

### Key features and benefits



Unique design ensuring  
best blowing performance



Special jacket materials  
providing low friction



High thermal stability



Low weight

# Distribution

## MOUNTING NUMEROUS COMPONENTS ON-SITE



### 19" Patch panels



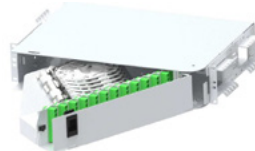
#### PSS-A0

Standard ODF 1U,  
up to 24xSC/48xLC ports



#### PST-A1

Premium telescopic ODF,  
up to 48xSC/96xLC ports in 1U,  
up to 96xSC/192xLC ports in 2U



#### PSR-B0

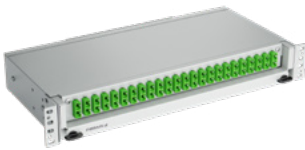
Pivot swivel ODF, 48xSC ports in 1U,  
96xSC ports in 2U, 144xSC ports  
in 3U



#### PS-19

3U Modular patch panel up to  
144xSC/288xLC ports, modular  
configurations

### 19" Patch panels



#### PUO

1.5 U Premium aluminium patch  
panel, up to 96 splices, available  
with multipatchcords



#### PSR-HD-U

1U pivot swivel ODF 215 mm  
depth, up to 72xSC adapters  
in HD holders

### 19" Cable shelves and organizers



#### PS-19-PAT/TUB

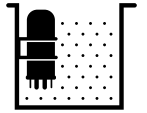
Tube/patchcords reserve shelf,  
full extension



#### ORG-HS/HP/VP

19" mounting cable organizers ver-  
tical/horizontal type

# Distribution

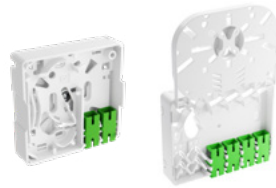


## Boxes and cabinets



### VFTO-R1

Customer outlet integrated with up to 40m pre-connected 900µm LSOH cable



### VFTO-E1/F1

Customer outlet, up to 4x SC/LCdx ports



### BU-XN

Riser box, up to 5xSC, max. 12 splices



### FDM

DIN rail module up to 24xSC/LC adapters, 24 splices



### NSR-S/M/L

Up to 12xSC ports in NSR-S, 24xSC ports in NSR-M, 72xSC ports in NSR-L



### IFDT-B0

Up to 48xSC ports, max. 48 splices optional cable reserve frame



### IFDT-F0

Up to 48xSC ports, max. 96 splices

### IFDT-G0

Double section cabinet up to 48xSC adapter, 96 splices in SCM-C splice cassette

## Closures



### FOBP-288 IP68

Up to 288 splices thermic and mechanical cable ports



### OBP-S8 / S8W

Distribution box up to 18xSC, max. 72 splices, IP54



### FB8000 IP68

Max. capacity 240 splices



### FB-XRA IP68

Max. capacity 144 splices



### OBP-C0

Up to 72 splices 36 SC DX adapters 40 drop ports



### BPEO-S4 IP68

Up to 72 splices 24 SC adapters 24 drop ports

## Outdoor cabinets



### FDH-S

Scalable system up to 1728 splices Steel housing



### FDH-G

Up to 144 SC adapters, 144 splices

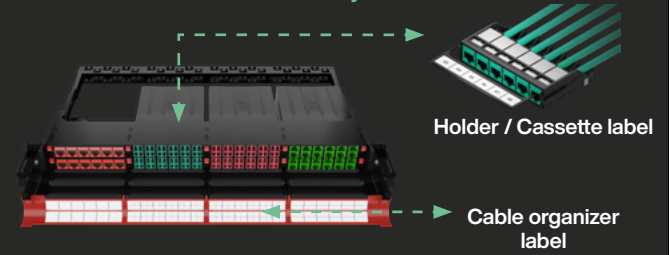
# FibrainDATA® HD System

→ [hd.fibrain.com](http://hd.fibrain.com)

## 1 Patch panels

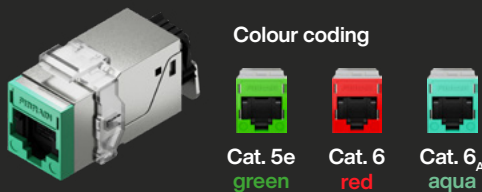
Scalability / Freedom of arrangement / Modularity

Wide range of applications / Saving precious space in the 19" rack / Quick and easy installation



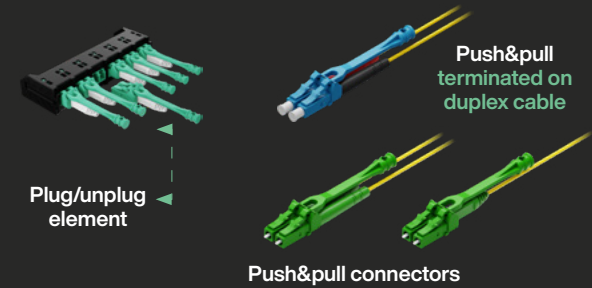
## 2 HD RJ45 modules

Wide range of applications / Saving precious space in the 19" rack / Quick and easy installation



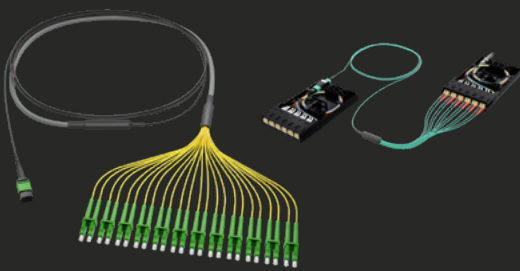
## 3 HD patchcords

6/12 FO variants / SM/MM fibers / PC/APC polishing / Uniboot option



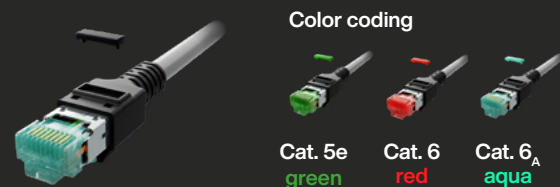
## 4 Harness cables

Wide range of applications / Saving precious space in the 19" rack / Quick and easy installation



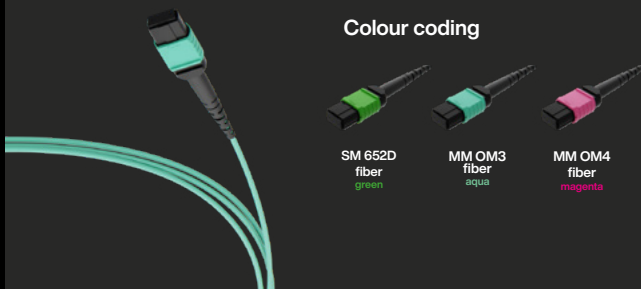
## 5 Copper patchcords

Compact dimensions / Full range of performance / Color identification



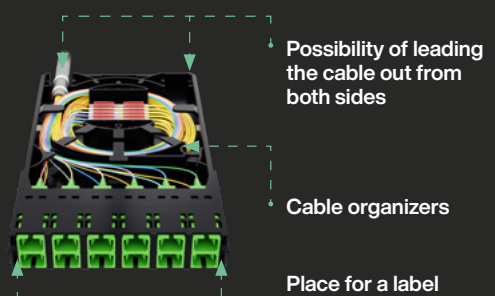
## 6 MPO trunk cables

A/B/C polarization / PC/APC polishing / Gender F/F F/M, M/F / MTP® standard



## 7 HD FO cassettes

6/12 FO ports / SC/LC interface support / Closed construction dust protection





# FIBRAIN DATA

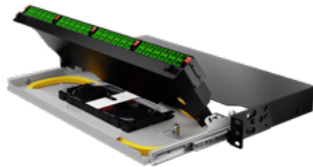
## HD Patch panels

Scalability / Freedom of arrangement / Modularity



### XBU00

0.5U modular, max. 24p (CU)/96p (FO LC Duplex)



### XEU00

1U 48p with tube reserve shelf



### XFU00

3U modular max. 120p (CU)/480p (FO LC Duplex)



### XPU00

1U modular max. 48p (CU)/192p (FO LC Duplex)



### XDU00

1U splice panel max. 96 splices



### XCU00

0.5U splice panel max. 48splices

## HD FO Cassettes



### Fiber optic MPO cassette

Equipped with 12 SC adapters



### Fiber optic splice cassette

Equipped with 12 SC adapters



### Fiber optic breakout cassette

Equipped with 12 SC adapters

## Installation cables

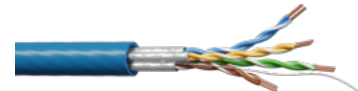
Full range of performance: 5e/6/6<sub>A</sub>/7/7<sub>A</sub>



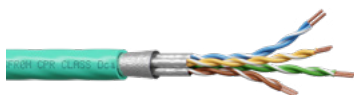
### FibrainDATA Cat. 5e U/UTP



### FibrainDATA Cat. 6 U/UTP



### FibrainDATA Cat. 6 U/FTP



### FibrainDATA Cat. 6<sub>A</sub> S/FTP



### FibrainDATA Cat. 7 S/FTP



### FibrainDATA Cat. 7<sub>A</sub> S/FTP

# System solutions & tools

## AirTrack

Core network



Anchoring clamps



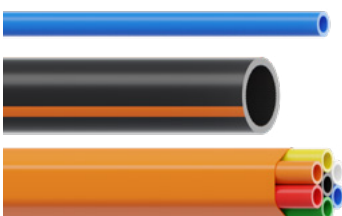
Suspension clamps



Tools & accessories

## MetroJet

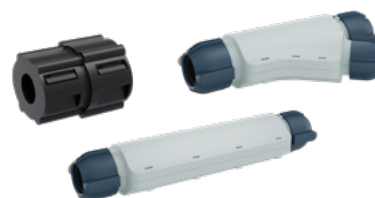
Fiber optic microduct system



Microducts & pipes



Connectors & sealings



End caps & joint closures



Blowing machines & accessories

## Tools & equipment

Fiber optic installation tools



Fiber optic tools



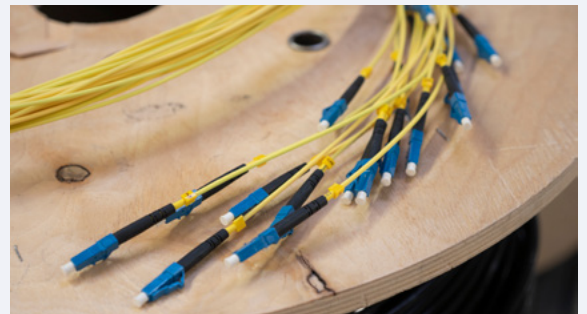
Cable cutters & slitters



Duct tools & others



Polish independent  
producer of integrated  
and value-added  
solutions



# From a single fiber to millions of satisfied customers around the world



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