



# Insight into

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**FIBRAIN** 

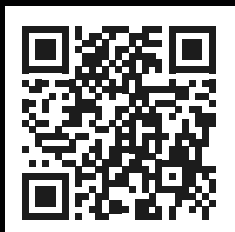
A comprehensive product  
portfolio → [www.fibrain.com](http://www.fibrain.com)



# FIBRAIN is where the journey of light begins

Highly-qualified experts  
in the fiber optics sector.

27 patents developing  
technical know-how.



FIBRAIN is one of only 10 companies  
worldwide to produce in-house  
optical fiber.

FROM A 150MM DIAMETER  
OF GLASS PREFORM, WE  
GET 0.125MM FIBER.





# Polish producer in fiber optic and photonics sector

+80 countries  
4 manufacturing centres  
+700 employees



HEADQUARTERS GŁOGÓW MAŁOPOLSKI



FIBER OPTIC TECHNOLOGIES & PHOTONICS  
MANUFACTURING LABORATORY CENTER IN  
ZACZERWIE (I)



FIBER OPTIC CABLE MANUFACTURING  
AND LABORATORY CENTER IN JASIONKA



FIBRAIN FIBER OPTIC R&D AND MANUFACTURING  
CENTRE IN ZACZERWIE (II)



FIBRAIN MÉXICO



DEVELOPED  
IN EUROPE

# A winning formula: top quality meets cutting-edge technology

SGS

ISO 9001:2015  
Quality Management Certificate

SGS

ISO 14001:2015  
Environmental Management Systems

SGS

ISO 45001:2018  
Health and Safety Management



NATO Commercial and  
Government Entity Code



DELTA



VDE



## Eco-conscious leadership



**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 anagement system ISO 14001: 2015



# FOC

**Producing even the most specialized cables is possible as FIBRAIN offers complete product portfolio and has extensive manufacturing capabilities. All products are meticulously tested and undergone series of tests including optical, climatic and mechanical in our Laboratories.**



# R&D

**R&D Department and Laboratory give FIBRAIN specialists the ability to perform accurate tests and create series of solutions specifically designed for the telecommunications markets which are based on FBT, CWDM, PLC and DWDM technologies.**

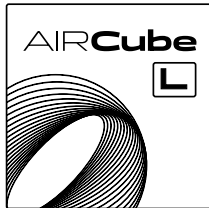




# Fiber Optic Cables

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

## Possibility of



**packaging 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

Datacenter / 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

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



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

Last mile indoor connection / LS0H 🔥 / Bendsafe / Easy to terminate /  
Datacenter / 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

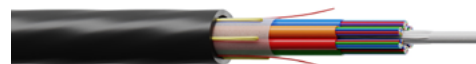
**AirReel®**



**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**

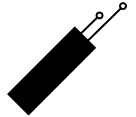
**MK-UX6 up to 192F in 6.6 mm**

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

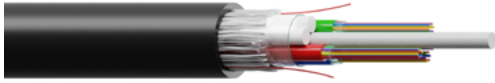
Microduct / Optimal diameter / Low friction / Telecom / Blowing installation  
/ 200 µm fibers



# 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



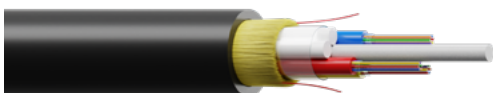
### AERO-DR03 1F, 3 mm, up to 55 m spans

FTTH / Last mile outdoor connection / Aerial / Telecom



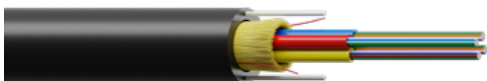
### AERO-DF03 2F-24F, up to 140 m spans

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®

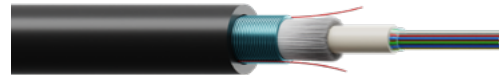
Last mile indoor connection / LS0H / Bendsafe / Flexible / Easy to terminate / FTTH



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

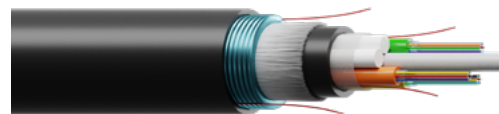
Direct buried / FTTH / Last mile outdoor connection / Hi-crush / Compact design

## ARMORED



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

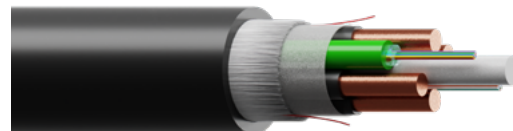
Telecom / High Rodent Protection / Duct / Direct buried



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

Telecom / High Rodent Protection / Duct / Direct buried

## HYBRID POWER+FO



### BDC-DIP 2.5 mm² H07V-U

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



OVER 3 000 000  
CONNECTORS TERMINATED  
ANNUALLY

THE BIGGEST CONNECTIVITY  
MANUFACTURING  
CENTER IN EUROPE

## Pigtails & Patch cords

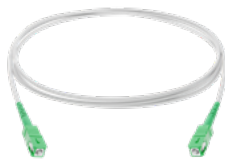
different type of connectors and fibers



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

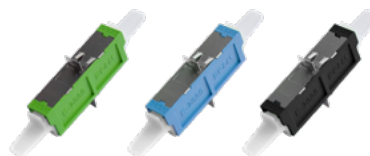
## Adapters



SC adapters



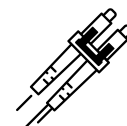
LC adapters



E2000 adapters



# Connectivity



## Launch fiber box & optical circuit simulator



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

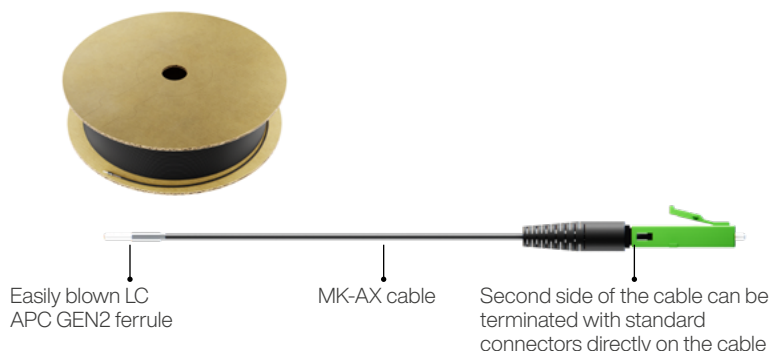
## Pre-connectorized cables & MTP/MPO Solution

Various cable types and connector combinations

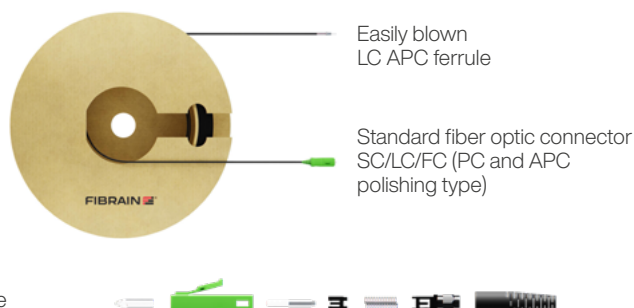


## Easily blown pre-connectorized GEN2 cable

Available connector: LC APC & LC PC



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



## Pre-connectorized cable on the drum



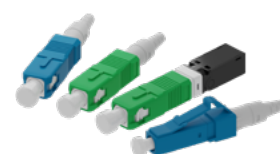
VC-Dxx Drop Cable


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



**Large pulling ranges**  
up to 100m



### 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



### Terminated with special ending for direct pulling

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



### High performance

high quality ferrule ensures best optical parameters

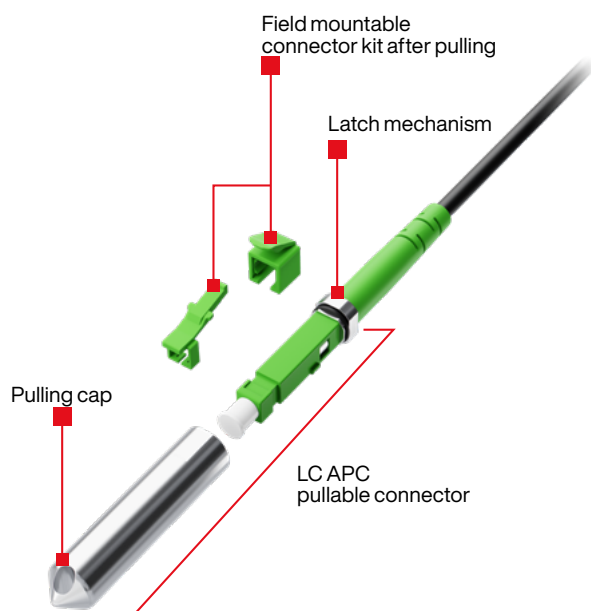


# FIBRAIN EPP

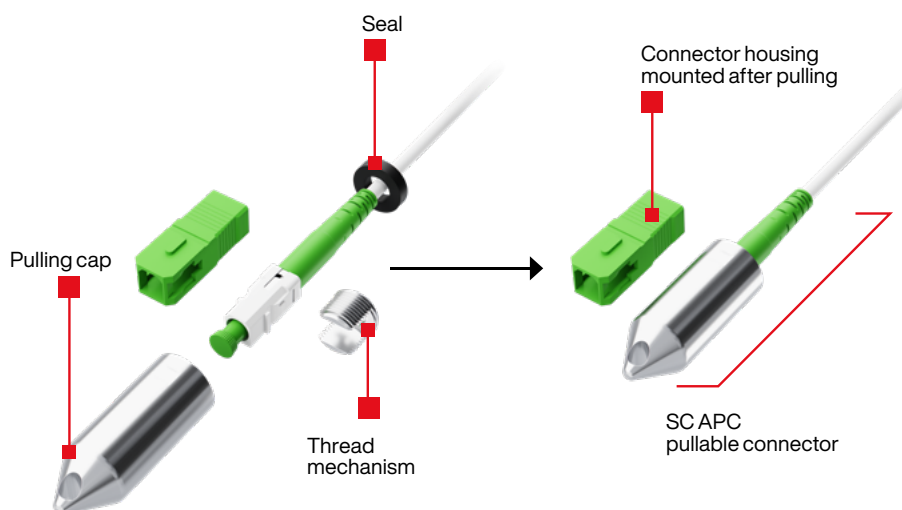


## Construction

### 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

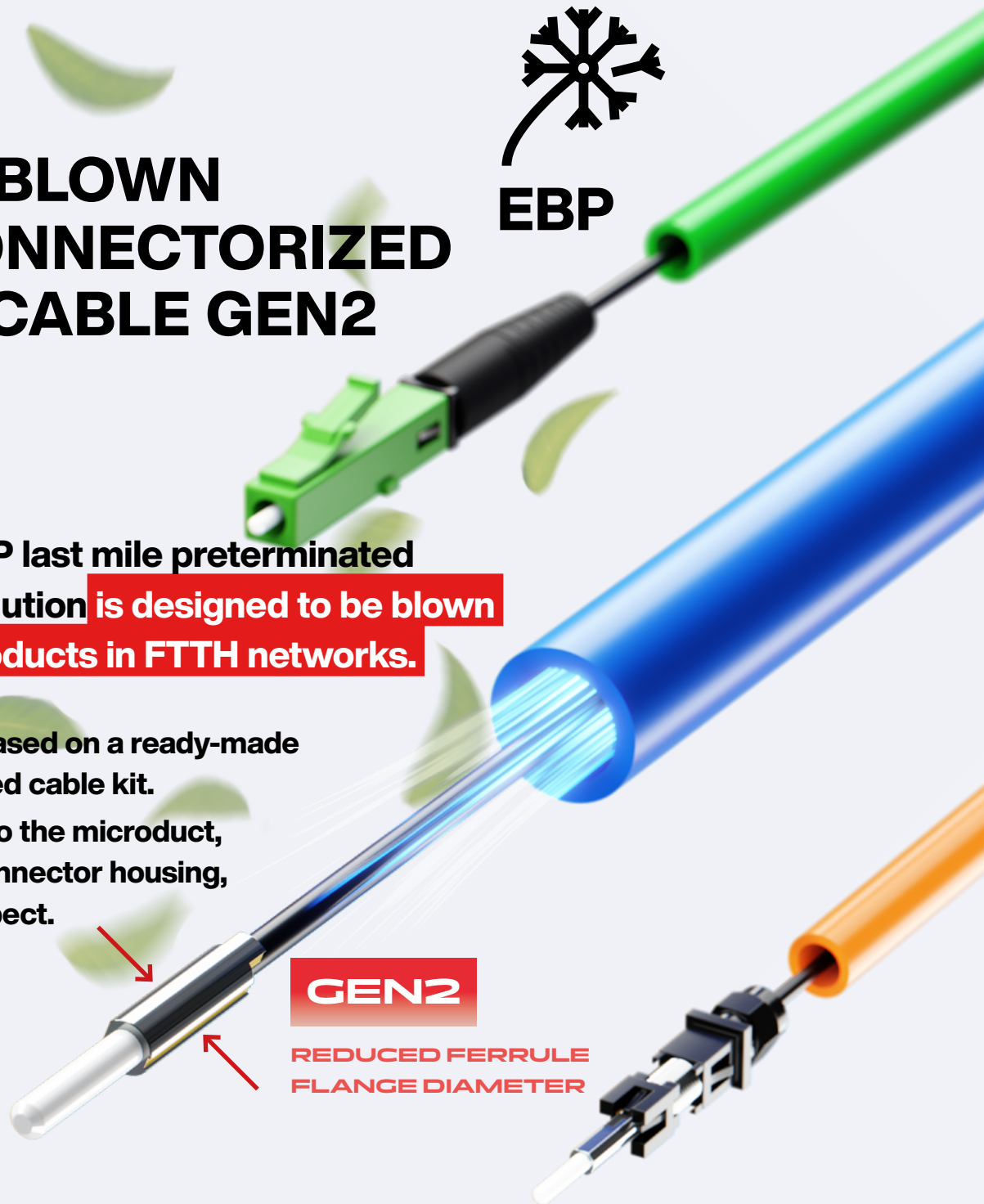
# EASILY BLOWN PRE-CONNECTORIZED MK-AX CABLE GEN2



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



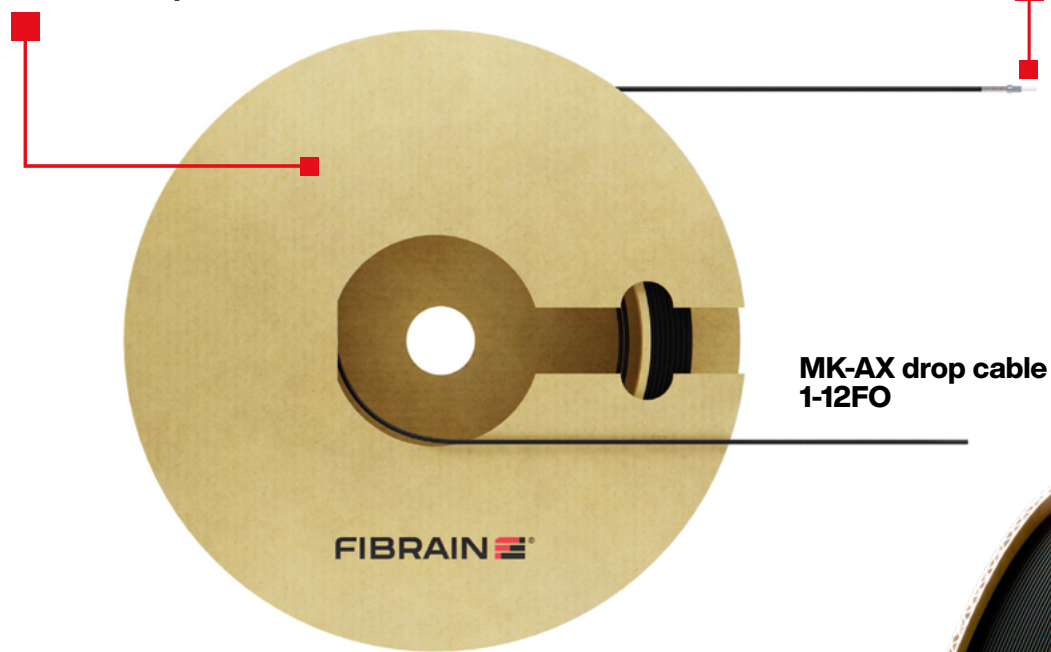
# FIBRAIN EBP GEN2



## 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



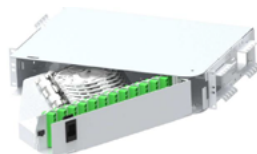
#### PSS-A0

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



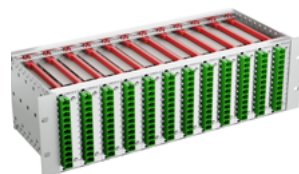
#### PST-A1

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

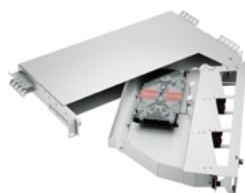
3U Modular patch panel up to  
144xSC/288xLC ports, modular  
configurations

### 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



#### PS-19-PAT/TUB

Tube/patchcords reserve shelf,  
full extension

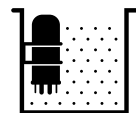


#### ORG-HS/HP/VP

19" mounting cable organizers ver-  
tical/horizontal type



# Distribution

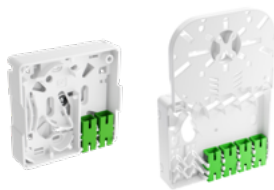


## Boxes and cabinets



### VFTO-R1

Customer outlet integrated with up to 40m pre-connectorized 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

## Outdoor cabinets



### 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



### FDH-S

Scalable system up to 1728 splices, Steel housing



### FDH-G

Up to 144 SC adapters, 144 splices

# FIBRAINDa- 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

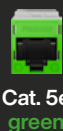


## 2 HD RJ45 modules

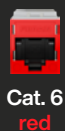
Wide range of applications / Saving precious space in the 19" rack / Quick and easy installation



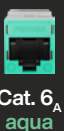
Colour coding



Cat. 5e  
green



Cat. 6  
red



Cat. 6<sub>A</sub>  
aqua

## 3 HD patchcords

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



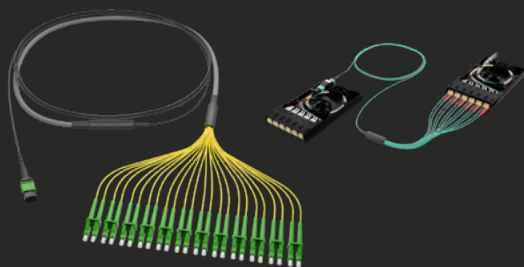
Push&pull  
terminated on  
duplex cable



Push&pull connectors

## 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

Color coding



Cat. 5e  
green



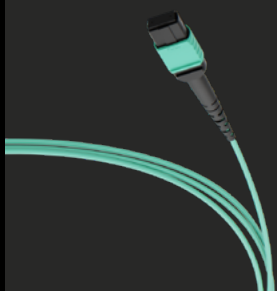
Cat. 6  
red



Cat. 6<sub>A</sub>  
aqua

## 6 MPO trunk cables

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



Colour coding



SM 652D  
fiber  
green



MM OM3  
fiber  
aqua



MM OM4  
fiber  
magenta

## 7 HD FO cassettes

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



Possibility of leading  
the cable out from  
both sides

Cable organizers

Place for a label



# FIBRAINData

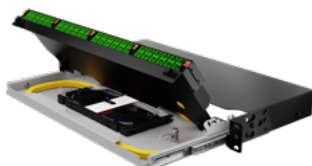
## HD Patch panels

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)



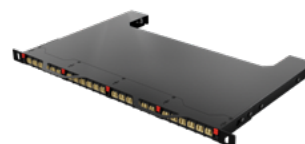
### XPU00

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

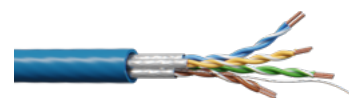
Full range of performance: 5e/6/6A/7/7A



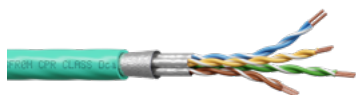
### FIBRAINData Cat. 5e U/UTP



### FIBRAINData Cat. 6 U/UTP



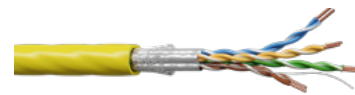
### FIBRAINData Cat. 6 U/FTP



### 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



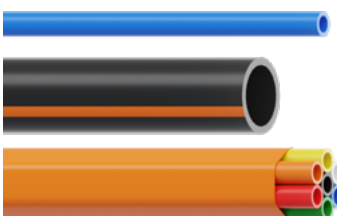
Suspension clamps



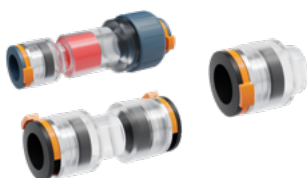
Tools & accessories

## 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



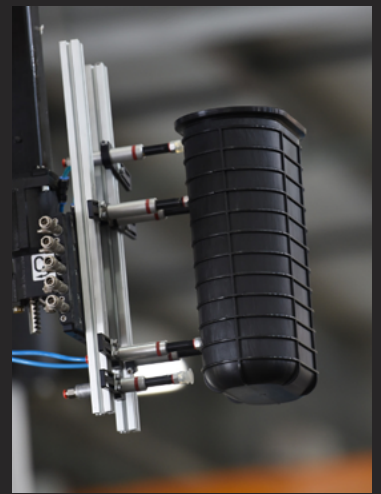
Cable cutters & slitters



Duct tools & others



Innovations are driving force  
our progress. World's  
unique, innovative R&D  
and production center.  
Independent, low-emission  
fiber optic manufacturing.



Independent  
and self-reliant  
producer

More than  
**30 years**  
on the market



Quality at  
a reasonable  
price



European  
production



International  
experience  
worldwide



Comprehensive  
solutions with  
system warranty

# FIBRAIN is where the journey of light begins.



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