FIBRAIN®

Distribution
2016

PATCH PANEL PS 19"

FIBRAIN

FIBER OPTIC CABLE FRAME AND SPARE LENGTH CABLE BOXES

Pipeline

Well
closure
+ frame

Outdoor
cabinet

Primal duct
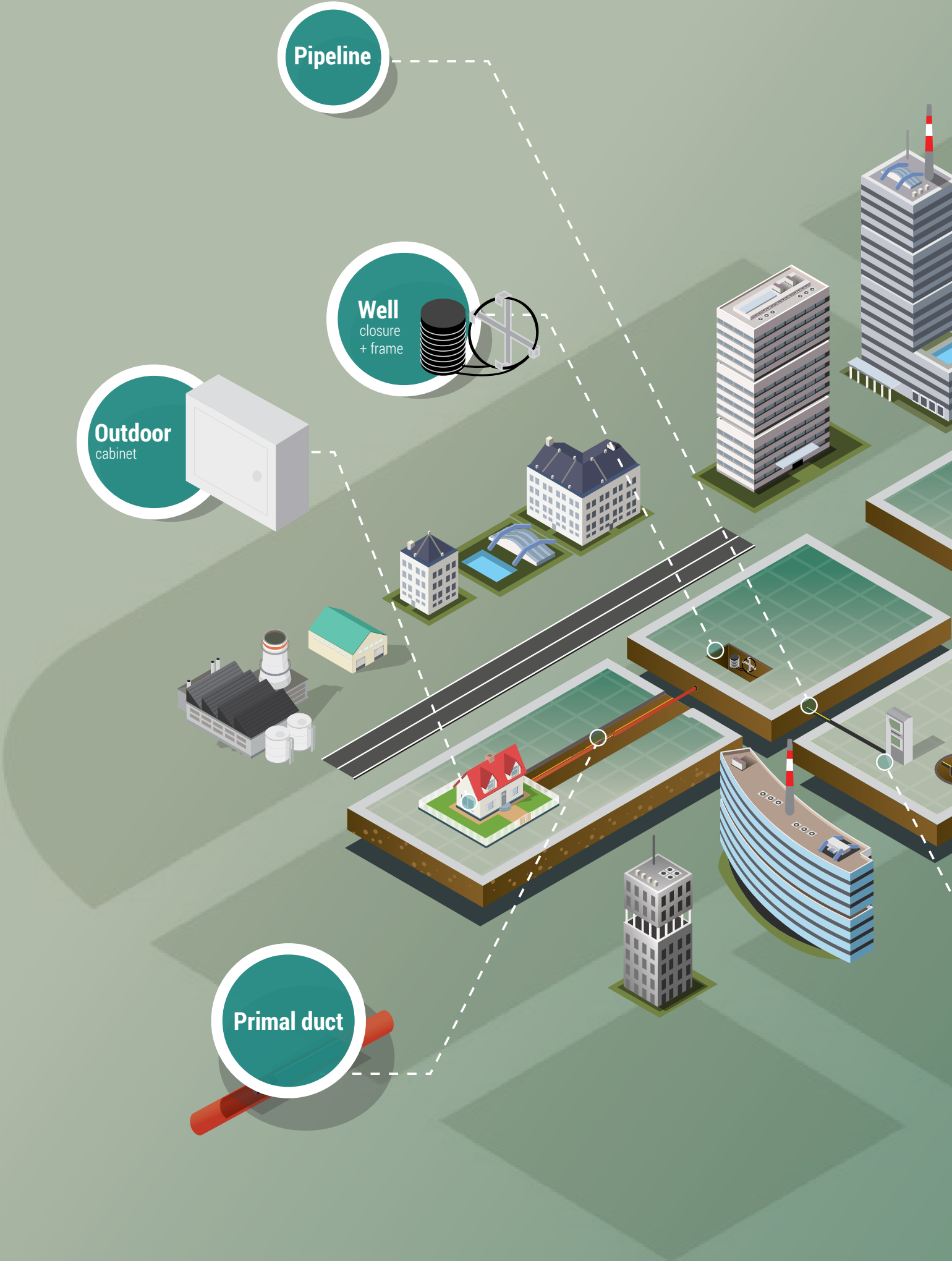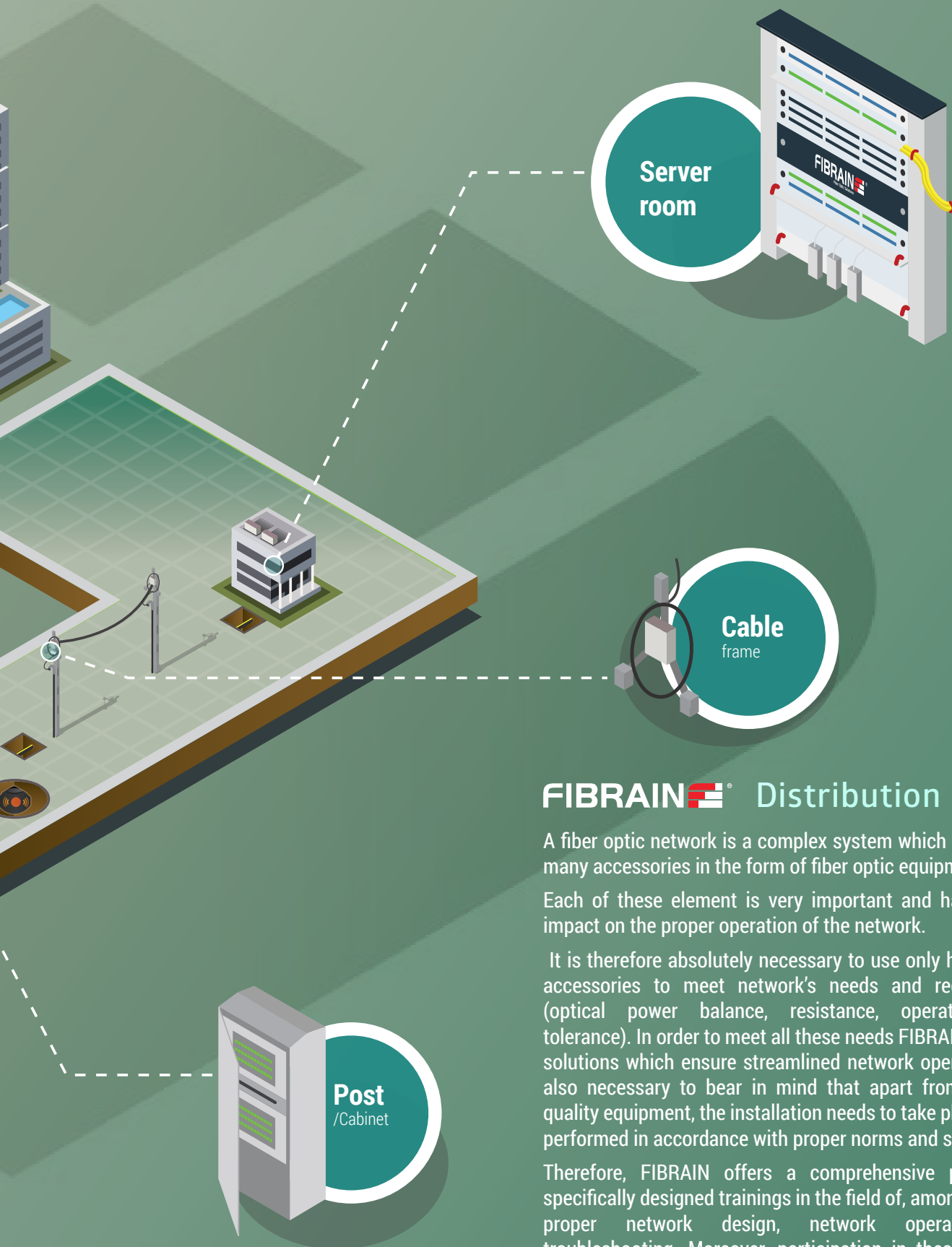
Server room

Cable frame

Post /Cabinet

FIBRAIN Distribution

A fiber optic network is a complex system which consists of many accessories in the form of fiber optic equipment.

Each of these element is very important and has a direct impact on the proper operation of the network.

It is therefore absolutely necessary to use only high quality accessories to meet network's needs and requirements (optical power balance, resistance, operation, fault tolerance). In order to meet all these needs FIBRAIN presents solutions which ensure streamlined network operation. It is also necessary to bear in mind that apart from premium quality equipment, the installation needs to take place and be performed in accordance with proper norms and standards.

Therefore, FIBRAIN offers a comprehensive porfolio of specifically designed trainings in the field of, amongst others, proper network design, network operation and troubleshooting. Moreover, participation in these trainings give all attendees a posssibility to obtain a certificate and network warranty.

Patchpanel PS 19"

Equipment presented in this section is a very important part of fiber optic network.

It is also the end or the beginning of each optical path.

Server room
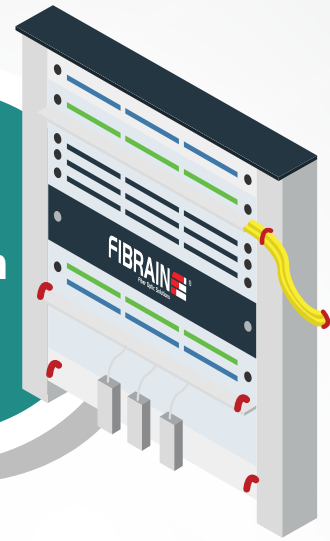
The construction of the equipment is based on telescopic fiber optic, rotating or modular patch panels.

Each of these solution is specifically designed and depends on network topology, number of optical points, as well as quantity and capacity of fiber optic cables.

Cable tray

Post /Cabinet

These solutions are often linked to optical network, thus our proposal concentrates the most significant elements of xWDM network as it integrates them in common patch panels which are equipped with specialized front panels.

These are usually "tailored made" systems to meet individual customers' specific needs and requirements.

Telescopic fiber optic patch panel PST-A1

Description

→ Fibrain telescopic fiber optic patch panel PST-A1 are specifically designed and tailored to meet our customers' needs. Main distribution areas where these panels can be applied are patching shelves and splicing shelves. Removable front panels facilitate installation of all standards of adapters, including hybrid combinations. Patch panels are made of grey RAL7035 powder-coated metal steel and are available in 1U and 2U options. Telescopic patch panels are available in black RAL7005 too. Panels on telescopic rails provide a full opening to mount cables easily. Cable entries are adjusted to mount PG13.5 - PG16 cable glands and preterminated multifiber cales (Fibrain multipatchcords solution). The interior design with handles facilitate proper management of fibers. Therefore, adjustable side handles provide the possibility to move t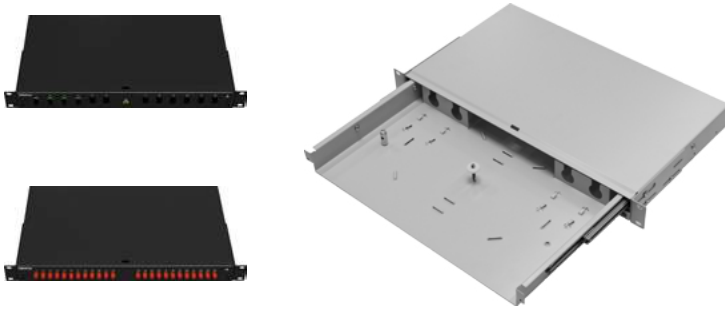he panel inside the cabinets. Our product portfolio offer includes a large variety of front plates, thus almost each standard of adapters can be easily mounted.

Technical specification

	PST-A1-01	PST-A1-02
Height	1U (44 mm)	2U (88 mm)
Width	19" (483 mm)	19" (483 mm)
Depth	258 mm	258 mm
Max. cassette capacity	3	6
Casing material	Powder painted steel	Powder painted steel

Applications

→ Fiber optics interchange points
→ Distribution networks
→ Serwer room

Ordering information*

PST-A1-01	Fibrain telescopic patch panel 1U, without front plate, without equipment, grey (RAL7035)
PST-A1-01B	Fibrain telescopic patch panel 1U, without front plate, without equipment, black (RAL9005)
PST-A1-02	Fibrain telescopic patch panel 2U, without front plate, without equipment, grey (RAL7035)
PST-A1-02B	Fibrain telescopic patch panel 2U, without front plate, without equipment, black (RAL9005)

*Patch panels presented in the above table need to equipped with front plate (available options are shown on p. 10-13, additionally patch panels are available with additional accessories – adapters, pigtails, splice cassettes, – showing on p. 14.)

Features & benefits

→ Available in 1U and 2U
→ Full opening on telescopic rails
→ Cable entries in a back part of a panel
→ Internal perforation to manage tubes or fibers
→ Faceplates for mounting adapters without screws
→ Optional front shelf to facilitate the management of patchcords
→ Adjustable side handles
→ Front plates can be optionally locked with a key
→ High capacity
→ Holder for the strength element of cable

Additional accessories – examples

PS-ORG-1-PP (extra 1U)

SCM-A-xx

FB2030G.V2P

Telescopic fiber optic patch panel
PST-A1-01 – 1U front plates

PST-A1 – configuration of 1U front plates

FB 2030

FB 2030K
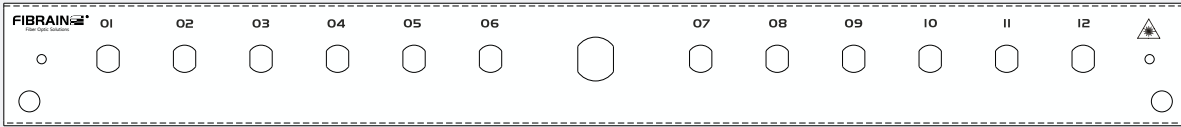
FB 2031

FB 2031B

FB 2031KB

FB 2032

FB 2032B

FB 2032K

FIBRAIN

Telescopic fiber optic patch panel
PST-A1-01 – 1U front plates
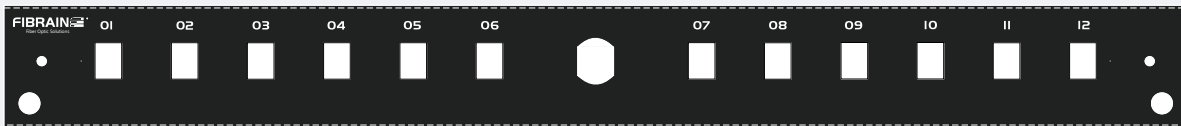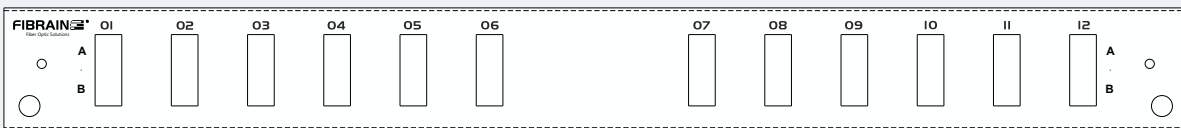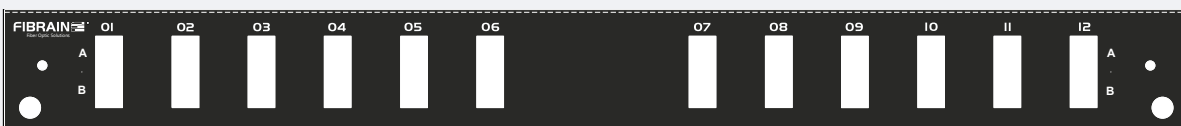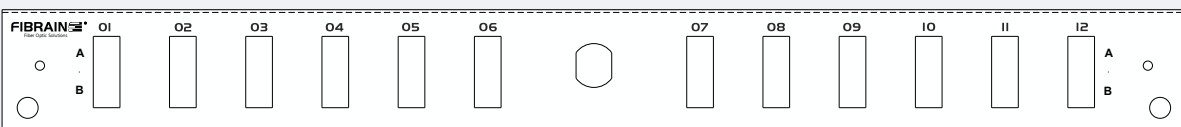
PST-A1 – configuration of 1U front plates
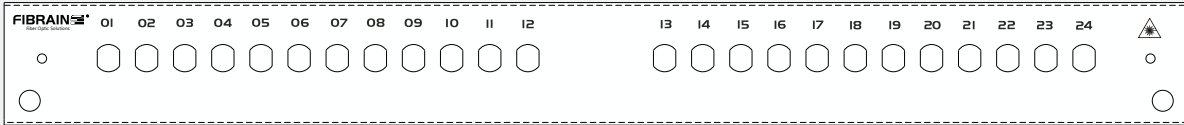
FB 2033

FB 2033K
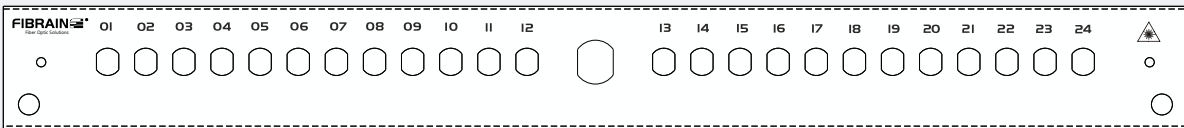
FB 2034
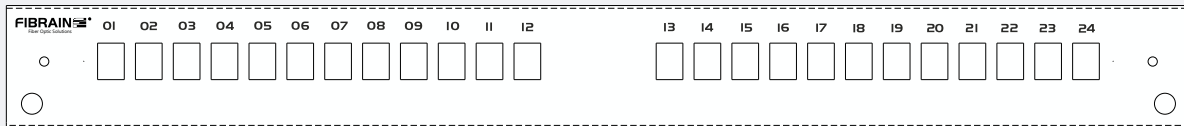
FB 2034B
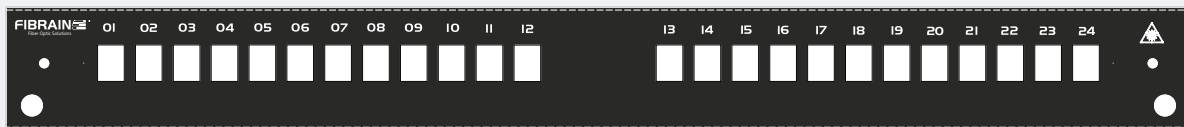
FB 2034K

FB 2035

FB 2035B

FB 2035K

Telescopic fiber optic patch panel
PST-A1-02 – 2U front plates
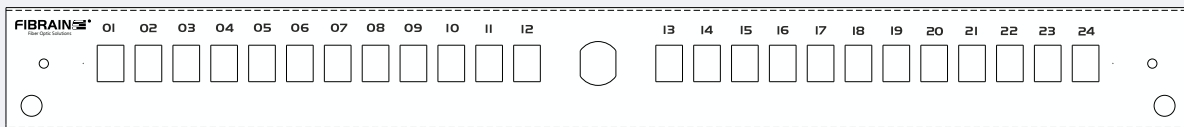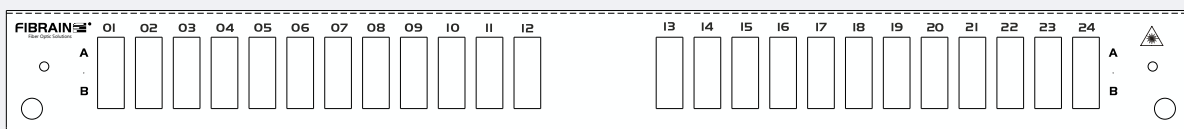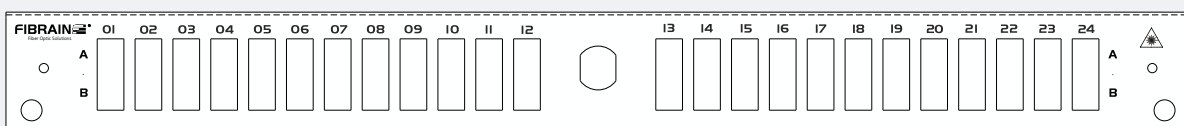
PST-A1 – 2U front plates

FB 2043

FB 2043K

FB 2044

FB 2045

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Telescopic fiber optic patch panel
PST-A1-02 – 2U front plates
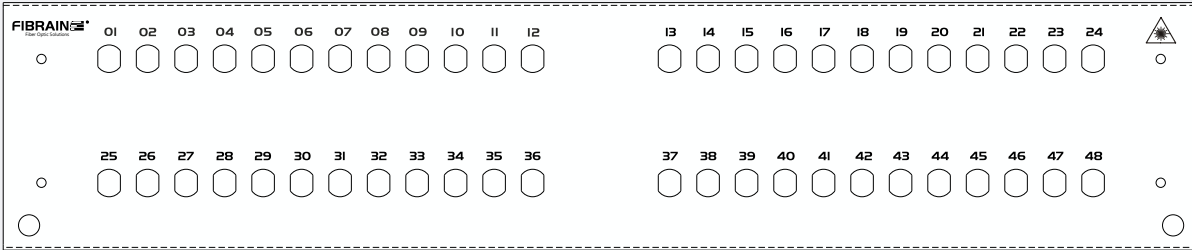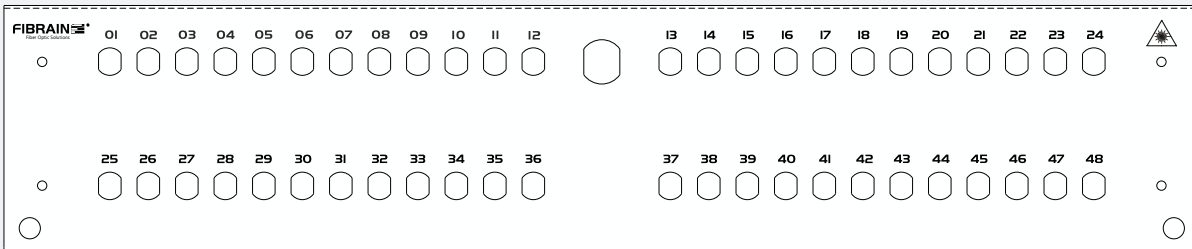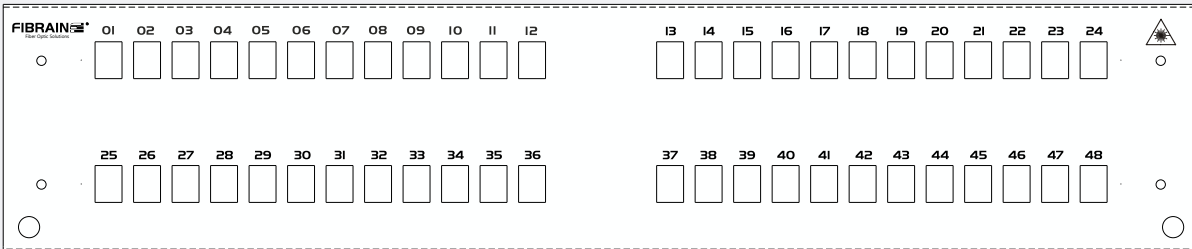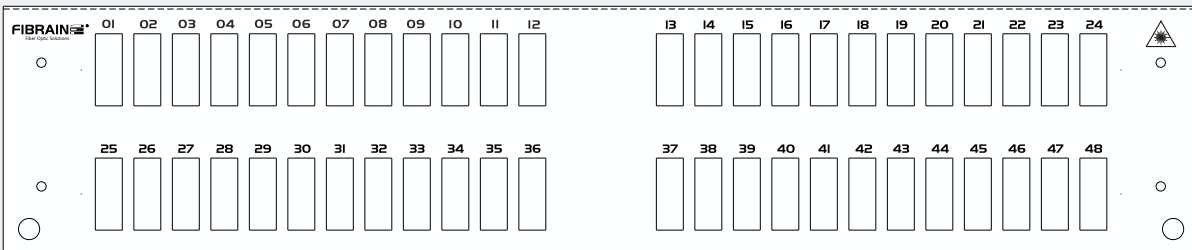
PST-A1 – 2U front plates

FB 2045K

FB 2046

FB 2046B
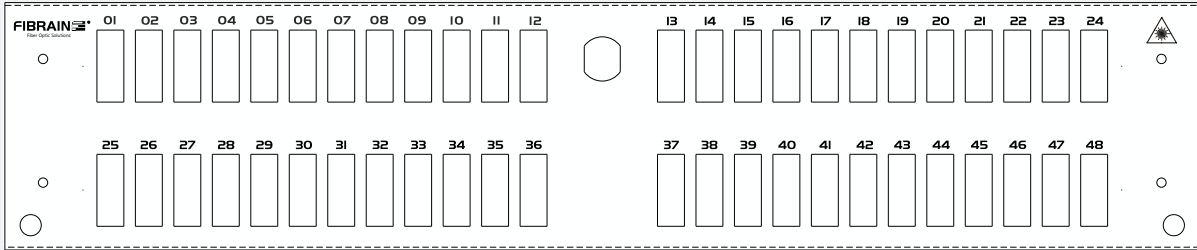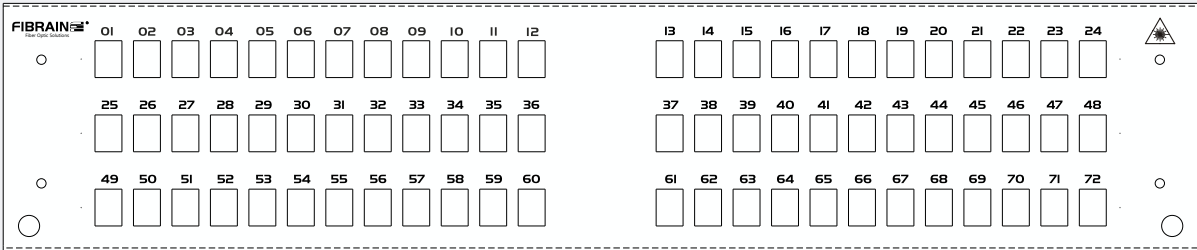
FB 2047

PST-A1 equipped patch panel
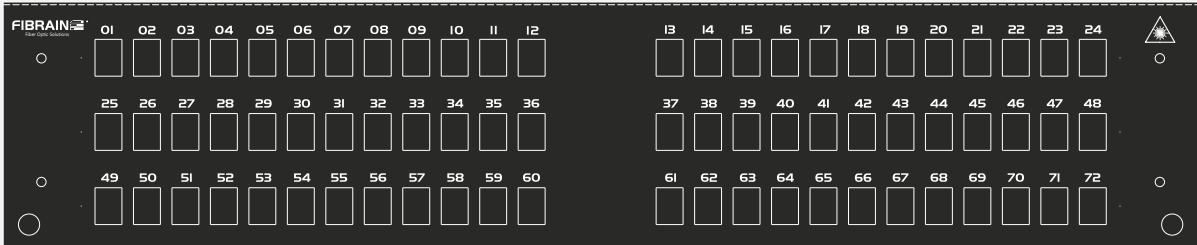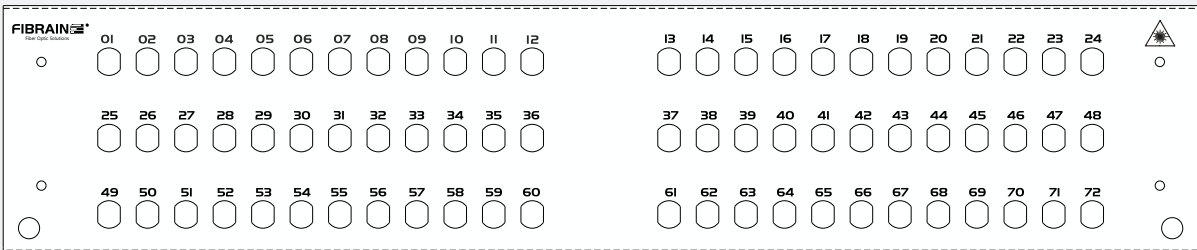
Examples of equipped PST-A1 patch panels

1. PST-A1-01060-24171-24D05G01-21-0241-11

PST-A1 patch panel, 1U, in grey RAL 7035, equipped with FB2033 front plate (24x FC SX) with mounted standard FC PC fiber optic adapters, 24 GOLD pigtails with FC PC on G.657A1, two splice cassettes SCM-A-12H, 24 splice protector 45 mm and one cable gland PG13.5

2. PST-A1-01020-04221-04D02G01-11-0041-11

PST-A1 patch panel, 1U, in grey RAL 7035, equipped with FB2031 front plate (12x SC SX, LC DX, E2000 SX) with mounted Premium Super One-Piece SC SPC fiber optic adapters, 4 GOLD pigtails with SC APC on G.657A1, one splice cassette SCM-A-12H, 4 splice protector 45 mm and one cable gland PG13.5

Ordering syntax for equipped PST-A1 patch panels:

PST-A1-AABBC-DDEFG-HHIJJKLL-MN-OOOP-RS

AA – Height	01 – 1U	grey RAL7035	
	02 – 2U	grey RAL7035	
	B1 – 1U	black RAL 9005	
	B2 – 2U	black RAL 9005	
BB – Front plate type	01 – FB2030	12x ST, FC	Panels 1U
	02 – FB2031	12x SC SX, LC DX, E2000 SX	
	03 – FB2031B	12x SC SX, LC DX, E2000 SX, black	
	04 – FB2032	12x SC DX, LC 4X	
	05 – FB2032B	12x SC DX, LC 4X, black	
	06 – FB2033	24x ST, FC	
	07 – FB2034	24x SC SX,LC DX, E2000 SX	
	08 – FB2034B	24x SC SX,LC DX, E2000 SX, black	
	09 – FB2035	24x SC DX, LC 4X	
	10 – FB2035B	24x SC DX, LC 4X, black	
	11 – FB2043	48x ST, FC	Panels 2U
	12 – FB2044	48x SC SX, LC DX, E2000 SX	
	13 – FB2045	48x SC DX, LC 4X	
	14 – FB2046	72x SC SX, LC DX, E2000 SX	
	15 – FB2046B	72x SC SX, LC DX, E2000 SX, black	
	16 – FB2047	72x ST, FC	
C – Lock	K –	plate with lock	
	0 –	plate without lock	

DD – Adapters qty	0-72	
E – Adapter class	0 –	none
	1 –	Standard One-Piece (or standard E2000, FC, ST)
	2 –	Premium Super One-Piece
	3 –	Premium One-Piece with internal shutter
	4 –	Premium Super One-Piece with internal shutter
	5 –	Premium (@FC, ST)
F – Adapter type	0 –	none
	1 –	SC
	2 –	SCA
	3 –	E2000
	4 –	E2000 APC
	5 –	LC
	6 –	LCA
	7 –	FC
	8 –	FCA
	9 –	ST
G – Transmission	1 –	SM
	2 –	MM (beige @SC/LC, black @E2000)
	3 –	MM OM3 (aqua @SC/LC)
	4 –	MM OM4 (violet @SC/LC)

HH – Pigtails qty	0-96	
I – Fiber type	A –	G.652D
	B –	G.655
	C –	G.656
	D –	G.657A1
	E –	G.657A2
	F –	G.657B2
	G –	G.657B3
	H –	MM OM1
	I –	MM OM2
	K –	MM OM3
	L –	MM OM4
JJ – Connector type	01 –	SC
	02 –	SCA
	03 –	LC
	04 –	LCA
	05 –	FC
	06 –	FCA
	07 –	E2
	08 –	E2A
	09 –	ST
K – Pigtail grade	S –	Silver
	G –	Gold
	T –	Titanium
LL – Color identification	01 –	for pigtails with yellow 0.9 mm buffer
	02 –	for pigtails with orange 0.9 mm buffer
	03 –	T TELECOM (acc. to IEC60304)
	04 –	T1 TELECOM (acc. to 60304/tab. 3 & ZN-11/TPSA-005-02)
	05 –	T2 TELECOM (acc. to EIA 598A)
	06 –	D DATACOM (acc. to DIN VDE 0888 & IEC 60304)
	07 –	D1 DATACOM (acc. to IEC 60304, TIA/EIA 598-A, TIA/EIA 598-C

M – Cassette qty	1-6	
N – Cassette type	1 –	SCM-A-12H
	2 –	SCM-A-24H

OOO – Sleeve qty	0-144	
P – Sleeve type	1 –	45 mm

R – Cable gland qty	1-4	
S – Cable gland type	1 –	PG13.5
	2 –	PG16

Example

PST-A1-01020-12121-12D02G01-11-0121-11

Fibrain telescopic fiber optic patch panel, 1U, equipped with front plate FB2031 (12x SC SX),Standard One-Piece SC APC adapters, 12 pigtails with SC APC connectors in Gold Grade with 2 m length in yellow buffer,

To order a non- standard option, please contact with our Sales Department.

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Telescopic fiber optic patch panel PST-C1

Technical specification

	PST-C1
Height [mm]	1U (44 mm)
Width [mm]	19" (483 mm)
Depth [mm]	256 mm
Max. cassette capacity	2
Casing material	Powder painted steel
Front flap	Anodized aluminium

PST-C1 telescopic fiber optic patch panel are available in equipped version.
Components of the equipped PST-C1:

→ **Telescopic patch panel C1** with front plate equipped with fiber optic adapters according to the tables below (quanitity, adapter type and class acc. to customer's need)

→ **Fiber optic splice cassette SCM-A-12H/SCM-A-24H** (depending on the amount of pigtails and adapters)

→ **Fiber optic pigtails in Gold grade on G.652D fiber** for SM transmission and OM2 fiber for MM transmission (technical data – Connectivity'16 catalog)

→ **Front shelf** for patchcord organisation

→ **Two vertical cable organizer**, equipped with easily opened-handle

→ **8 holders** facilitates effective placement of fibers

→ **PG16 cable gland**

→ **Splice protectors** 45 mm

→ **Optional blanking panel** (1x panel with adapters, 1x blanking panel)

Description

→ Fibrain telescopic patch panel offers excellent flexibility during mounting and installation. Mainly used for distribution – patching or splicing shelves. Constructed of high quality material ensuring very easy installation and maintenance.

→ Removable front panels facilitates installation of all kinds of adapters, including the creation of hybrid combinations.

→ Patch panels are made of powder-coated steel as standard in black and available in 1U option. The movable front flap is made of anodized aluminum which protects pigtails against accidental damage. Panels mounted on telescopic rails provide a full extension for easy cable mounting. Cable entry adjusted to mount PG16 cable glands and terminated FIBRAIN multipatchcords solution. The interior design with handles with handles facilitate the proper management of fiber. Therefore, adjustable side handles provide the possibility to move the panel inside the cabinets.

❖ Applications

→ Fiber optics interchanges points

→ Distribution networks

→ Serwer room

Features & benefits

→ 1U

→ Full extension on telescopic rails

→ Cable entry shifted back in a patch panel

→ Handles to manage tubes or fibers

→ Removable faceplates for mounting adapters without screws

→ Front shelf for patchcords management

→ Adjustable side handles

→ High capacity

→ Moveable front flap, which is a patch cord protection from accidental damage

PST-C1 with SC fiber optic adapters and pigtails terminated with SC connector
(additional components in equipment described above)
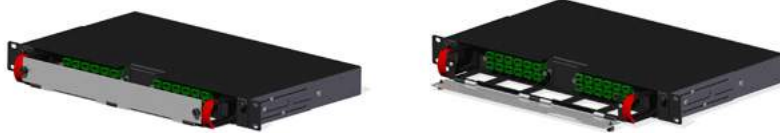
Adapters qty	Adapter type and class	Serial number
6	SC PC SM Standard One-Piece	PST-C1-01-101-06111-06D011-11-061-12
	SC PC SM Super One-Piece	PST-C1-01-101-06211-06D011-11-061-12
	SC APC SM Standard One-Piece	PST-C1-01-101-06121-06D021-11-061-12
	SC APC SM Super One-Piece	PST-C1-01-101-06221-06D021-11-061-12
	SC PC MM Standard One-Piece	PST-C1-01-101-06112-06I012-11-061-12
12	SC PC SM Standard One-Piece	PST-C1-01-101-12111-12D011-11-121-12
	SC PC SM Super One-Piece	PST-C1-01-101-12211-12D011-11-121-12
	SC APC SM Standard One-Piece	PST-C1-01-101-12121-12D021-11-121-12
	SC APC SM Super One-Piece	PST-C1-01-101-12221-12D021-11-121-12
	SC PC MM Standard One-Piece	PST-C1-01-101-12112-12I012-11-121-12
24	SC PC SM Standard One-Piece	PST-C1-01-201-24111-24D011-12-241-12
	SC PC SM Super One-Piece	PST-C1-01-201-24211-24D011-12-241-12
	SC APC SM Standard One-Piece	PST-C1-01-201-24121-24D021-12-241-12
	SC APC SM Super One-Piece	PST-C1-01-201-24221-24D021-12-241-12
	SC PC MM Standard One-Piece	PST-C1-01-201-24112-24I012-12-241-12

Telescopic fiber optic patch panel PST-C1

PST-C1 with LC fiber optic adapters and pigtails terminated with LC connector
(additional components in equipment described are shown on p.15)

Adapters qty	Adapter type and class	Serial number
6	LC PC SM Standard One-Piece	PST-C1-01-101-06151-12D051-11-121-12
	LC PC SM Super One-Piece	PST-C1-01-101-06251-12D051-11-121-12
	LC APC SM Standard One-Piece	PST-C1-01-101-06161-12D061-11-121-12
	LC APC SM Super One-Piece	PST-C1-01-101-06261-06D061-11-121-12
	LC PC MM Standard One-Piece	PST-C1-01-101-06152-12I052-11-121-12
12	LC PC SM Standard One-Piece	PST-C1-01-101-12151-24D051-12-241-12
	LC PC SM Super One-Piece	PST-C1-01-101-12251-24D051-12-241-12
	LC APC SM Standard One-Piece	PST-C1-01-101-12161-24D061-12-241-12
	LC APC SM Super One-Piece	PST-C1-01-101-12261-24D061-12-241-12
	LC PC MM Standard One-Piece	PST-C1-01-101-12152-24I052-12-241-12
24	LC PC SM Standard One-Piece	PST-C1-01-201-24151-48D051-22-481-12
	LC PC SM Super One-Piece	PST-C1-01-201-24251-48D051-22-481-12
	LC APC SM Standard One-Piece	PST-C1-01-201-24161-48D061-22-481-12
	LC APC SM Super One-Piece	PST-C1-01-201-24261-48D061-22-481-12
	LC PC MM Standard One-Piece	PST-C1-01-201-24152-48I052-22-481-12

PST-C1 with FC fiber optic adapters and pigtails terminated with FC connector
(additional components in equipment described are shown on p.15)

Adapters qty	Adapter type and class	Serial number
6	FC PC SM Standard	PST-C1-01-102-06171-06D071-11-061-12
	FC APC SM Standard	PST-C1-01-102-06181-06D081-11-061-12
	FC PC MM Standard	PST-C1-01-102-06172-06I072-11-061-12
12	FC PC SM Standard	PST-C1-01-102-12171-12D071-11-121-12
	FC APC SM Standard	PST-C1-01-102-12181-12D081-11-121-12
	FC PC MM Standard	PST-C1-01-102-12172-12I072-11-121-12
24	FC PC SM Standard	PST-C1-01-202-24171-24D071-11-241-12
	FC APC SM Standard	PST-C1-01-202-24181-24D081-11-241-12
	FC PC MM Standard	PST-C1-01-202-24172-24I072-11-241-12

🗎 Description

→ Fibrain telescopic patch panel offers excellent flexibility during mounting and installation. Mainly used for distribution – patching or splicing shelves. Constructed of high quality material ensuring very easy installation and maintenance.

→ Removable front panels facilitates installation of all kinds of adapters, including the creation of hybrid combinations.

→ Patch panels are made of powder-coated steel as standard in black and available in 1U option. The movable front flap is made of anodized aluminum which protects pigtails against accidental damage. Panels mounted on telescopic rails provide a full extension for easy cable mounting. Cable entry adjusted to mount PG16 cable glands and terminated FIBRAIN multipatchcords solution. The interior design with handles with handles facilitate the proper management of fiber. Therefore, adjustable side handles provide the possibility to move the panel inside the cabinets.

❖ Applications

→ Fiber optics interchanges points
→ Distribution networks
→ Serwer room

⊞ Features & benefits

→ 1U
→ Full extension on telescopic rails
→ Cable entry shifted back in a patch panel
→ Handles to manage tubes or fibers
→ Removable faceplates for mounting adapters without screws
→ Front shelf for patchcords management
→ Adjustable side handles
→ High capacity
→ Moveable front flap, which is a patch cord protection from accidental damage

FIBRAIN

Modular patch panel 3U Telecom

PS-19-xx

1. Chassis (frame)
2. Plug stopper for unused ports
3. Equipped module for 3U patch panel

📄 Description

→ Fibrain 3U modular patch panels are solution facilitating termination up to 144/288 fibers in signal distribution points as well in server rooms. Smart design allows easy and time-saving way of installation and mounting of fiber optic cables. Main elements of this solution is frame of modular patch panel (chassis) and equipped 3U modular patch panel. Complete solution also offers patchcords management shelf, tubes and patchcords reserve shelf as well as fiber optic cables tubes separators.

→ Additionally 3U modular patch panels can be provide with single modules equipped with MTP®/MPO Direct Split, which is perfect solution for Data Center apllication. Direct split allows to connect MTP multi-fiber connectors with standard, single-fiber optic connectors.

Technical specification

PS-19-3-0.PRO CHASSIS	
Height	3U (133.35 mm)
Width [mm]	436 (19")
Depth [mm]	160
Frame material	aluminium
Sliders material	ABS
PS-01-XX MODULE	
Length [mm]	220
Width [mm]	129
Depth [mm]	35

❖ Applications

→ Telecommunication server rooms
→ FTTH networks
→ Metro networks
→ Structural cabling systems
→ Data Center systems

Ordering information

Product	Serial number
Chassis – patch panel frame	PS-19-3-0.PRO
Equipped module for 3U patch panel	PS-01-xx & PS-M1-xx see page 20-21
Plug stopper for unused ports	PS-00-P
Patchcords reserve shelf	PS-19-1-PAT (grey RAL 7035) PS-19-1-PAT-B (black RAL 9005
Tubes reserve shelf	PS-19-1-TUB
Patchcords management shelf	PS-ORG-1-PP
Fiber optic cables tube separator	RT-01-xx, see page 33

Features & benefits

→ Capacity up to 144/288 fibers in 3U
→ Lightweight and strong aluminium construction
→ Modules ready to be mounted
→ Facilitated mounting of fiber optic cable's tube
→ Clear management of fiber optic

3U modules for modular patch panel

PS-01-xx & PS-M1-xx

3U module for modular patch panel equipped with fiber optic adapter, pigtails, splice cassette and pigtails reserve cassette in "spliced" version

📄 Description

→ Fibrain 3U modules patch panel is a component used in a 3U modular patch panel and a solution which enables termination of max. 12 or 24 fiber optic cables. It can store pigtails and protect fiber optic connections. Patch panels are equipped with splice cassettes for 12/24 45mm splice protection sleeves. Therefore, the panel has got the cassette with pigtails, which facilitates mounting and secure pigtails. Delivered modules are ready to be mounted because are equipped with adapters and pigtails. PS-01 Fibrain panels guarantee mounting up to 12 SC PC/APC and E2000 PC/APC adapters as well as 3 or 6 LC 4X fiber optic adapters (LC quad).

→ Fibrain 3U modules allows to install MTP®/MPO Direct Split, which are perfect solution to combine MTP®/MPO multi-fiber connectors with standard, single-fiber optic connectors. Front panel is designed for different type of fiber optic adapter, like: SC SX, E2000 SX and LC 4X (quad). Additionally, module is equipped with MTP®/MPO adapter (one or two according to Direct Split quantity)

PS-M1 modules for mounting MTP®/MPO Direct Split solution with capacity:

→ **1x Direct Split 12F** (3 x LC quad adapter)
→ **2x Direct Split 12F** (6 x LC quad adapter)
→ **1x Direct Split 24F** (6 x LC quad adapter)

❖ Applications

→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ Server rooms

Technical specification

	PS-01-XX	PS-19-XX
Length [mm]	220	200
Width [mm]	129	129
Depth [mm]	35	35

Features & benefits

→ Capacity up to 12/24 splices
→ Modules ready to be mounted
→ Fiber optic splice cassette made of ABS
→ Facilitated identification and work due to 12 colours of pigtails
→ Possibility to install fusion and mechanical splices in a fiber optic cassette
→ Wide range of fiber optic adapters available
→ Adapted to mounting MTP®/MPO Direct Split

Ordering information

PS-01-xx	Single 3U patch panel module, equipment versions – page 20
PS-M1-xx	Single 3U patch panel module for MTP®/MPO solutions, equipment versions – page 21

FIBRAIN

PS-19-xx – 3U front plate configuration

Single panels for PS-19-01
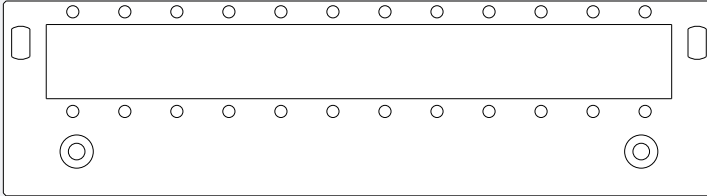
12xSC SX / E2000™ SX

6x LC DX (+6 plug stoppers)
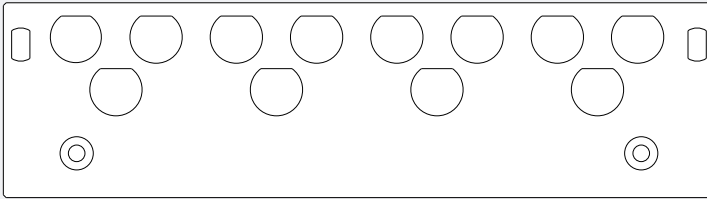
12xFC SX / ST SX
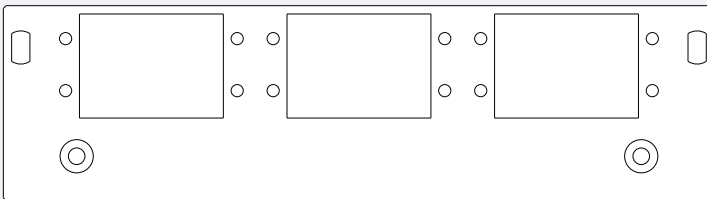
6 x LC 4X (LC quad)
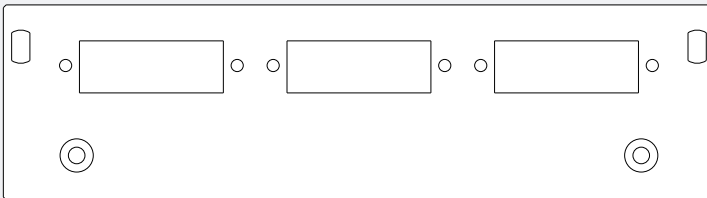
3 x LC 4X (LC quad)

3U modules for modular patch panel PS-01 – ordering syntax

3U modules for modular patch panel PS-01 – ordering syntax

Spliced version of 3U module

PS-XX-A-B-CCDEEF-GGHII-JJK

XX – Width	01	single
A – Fiber type	A	SMF 652D
	B	SMF 655
	D	SMF 657A1
	E	SMF 657A2
	F	SMF 657A3
	G	SMF 657B3
	H	MM OM1
	I	MM OM2
	K	MM OM3
	L	MM OM4
B – Cassette type	1	SCM-A-12H
	2	FB7401PP (in case of use FB7401PP module size: 211x129x35.2 (Length x Width x Depth))
	3	SCM-A-24H
CC – Adapters qty		1-12 (single)
D – Adapter class	1	Standard One-Piece (@E2000, FC, ST)
	1T	Standard One-Piece with transparent cap (only for SC APC)
	2	Premium One-Piece with internal shutter
	3	Premium Super-One Piece with internal shutter
EE – Adapter type	01	SC SX
	02	SCA SX
	03	E2 SX
	04	E2A SX
	05	LC 4X
	06	LCA 4X
	07	FC SX
	08	FCA SX
	09	ST SX

F – Transmission	1	SM
	2	MM (beige @SC/LC, black @E2000)
	3	MM OM3 (aqua @SC/LC)
	4	MM OM4 (violet @SC/LC)
GG – Pigtails qty		00-24
H – Pigtail grade	S	Silver
	G	Gold
	T	Titanium
II – Color identification	01	for pigtails with yellow 0.9 mm buffer
	02	for pigtails with orange 0.9 mm buffer
	03	T TELECOM (acc. to IEC60304)
	04	T1 TELECOM (acc. to 60304/tab. 3 & ZN-11/TPSA-005-02)
	05	T2 TELECOM (acc. to EIA 598A)
	06	D DATACOM (acc. to DIN VDE 0888 & IEC 60304)
	07	D1 DATACOM (acc. to IEC 60304, TIA/EIA 598-A, TIA/EIA 598-C
JJ – Splice protector qty		00-24
K – Sleeve type		1-45 mm

Example

PS-01-A-1-121021-12G01-121

Fibrain 3U patch panel module with pigtail reserve cassette, single, equipped with 12 SC APC Standard One-Piece adapters, 12 SC APC Gold Grade pigtails length: 2 m, 1 splice cassette for up to 12 sleeves and 12 splice protectors 45 mm

To order a non- standard option, please contact with our Sales Department.

FIBRAIN

3U modules for modular patch panel PS-M1 – ordering syntax
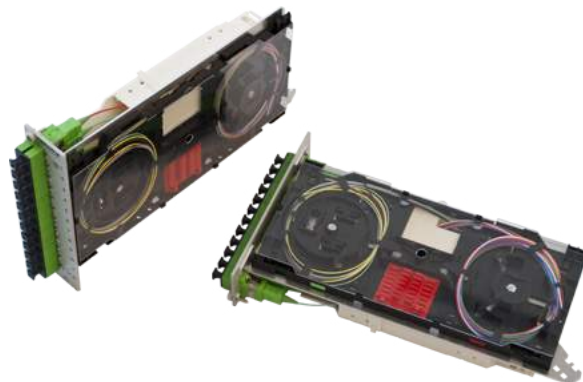
3U patch panel module PS-M1 ordering syntax

3U patch panel module equipped with Direct Split – MTP® solution

PS-M1-A-B-CDEFGG-GGHIJJK-LM

A – Fiber type	A	SMF 652D
	B	SMF 655
	D	SMF 657A1
	E	SMF 657A2
	F	SMF 657A3
	G	SMF 657B3
	H	MM OM1
	I	MM OM2
	K	MM OM3
	L	MM OM4
B – Front panel type	1	12x SC SX/12x E2000 SX/6x LC DX (+ 6 port caps between LC DX adapters)
	2	12x ST/FC
	3	6x LC 4X (6x LC QUAD)
	4	3x LC 4X (3x LC QUAD)
C – Direct Split qty	1	1 x DS in the module
	2	2 x DS in the module
D – Direct Split type	1	1x12
	2	1x24
E – Connectors Grade	G	Gold MTP®/MPO & Gold for single-fiber connectors
	T	Titanium MTP®/MPO & Titanium for single-fiber connectors
F – Connector type MTP®/MPO	1	MTP female APC
	2	MTP male APC
	3	MTP female MM
	4	MTP male MM

GG – Single-fiber connectors type	01	SC
	02	SC APC
	03	LC
	04	LC APC
	05	FC
	06	FC APC
	07	E2000
	08	E2000 APC
I – Adapters qty (front)	**1-12**	
I – Adapter class (front)	1	Standard One-Piece (@E2000, FC, ST too)
	1T	Standard One-Piece with transparent cap (only for SC APC)
	2	Premium One-Piece with internal shutter
	3	Premium Super One-Piece with internal shutter
JJ – Adapter type (front)	01	SC SX
	02	SCA SX
	03	E2 SX
	04	E2A SX
	05	LC 4X
	06	LCA 4X
	07	FC SX
	08	FCA SX
	09	ST SX
K – Transmission	1	SM
	2	MM (beige @SC/LC, black @E2000)
	3	MM OM3 (aqua @SC/LC)
	4	MM OM4 (violet @SC/LC)
L – MTP®/MPO adapters qty	**1-2**	
M – MTP®/MPO adapters type	1	Reversed key
	2	Opposed key

Example

PS-M1-A-5-11G104-031051-11

Fibrain 3U patch panel module equipped with Direct Split, terminated with female MTP connector and LC APC connectors on G.652D fiber type, 3 LC APC Standard One-Piece adapters and 1 MTP Reversed Key adapter

To order a non- standard option, please contact with our Sales Department.

Rotational patch panel with side access PSR-A0

Technical specification

	PSR-A0-01	PSR-A0-02
Height	1U	2U
Maximal fiber qty	48	96
Maximal splice qty	48	96
Maximal splice cassette qty	2	4
Maximal line cable diameter [mm]	12	
Depth [mm]	315	
Operating temperature	-20°C – +50°C	
Casing material	Powder painted steel	

Equipped PSR-A0 rotational patch panel in black version (RAL 9005)
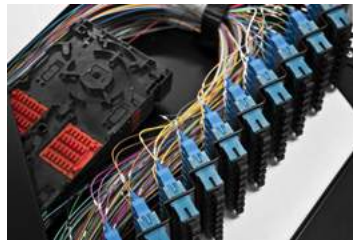
Interior view of PSR-A0 with mounting splice cassette, adapters and pigtails

Ordering information – non-equipped version

PSR-A0-01-R-00-00000-0000000-000	Fibrain 1U rotational patch panel, right side A0 version, non-equipped; grey (RAL7035)
PSR-A0-02-R-00-00000-0000000-000	Fibrain 2U rotational patch panel, right side A0 version, non-equipped; grey (RAL7035)
PSR-A0-B1-R-00-00000-0000000-000	Fibrain 1U rotational patch panel, right side A0 version, non-equipped; black (RAL 9005)
PSR-A0-B2-R-00-00000-0000000-000	Fibrain 2U rotational patch panel 2U, right side A0 version, non-equipped; black (RAL 9005)

Description
→ Rotational patch panel PSR-A0 type, in 1U or 2U version, is basic mounting block for fiber management system , in patch panel holder. Available in version routing on the left or right side, so it offers well accessibility to trays and patching cords on both sides. It minimizes and protect patch cords cables movement inside patch panels.

→ Patch panel PSR-A0 offers trays patch cords in SC simplex standard for 48 fields in 1U version or 96 fields in 2U, available installation into 2 or 4 splice trays for 24 solders . Tray patch cords allow mount connector for 25 degree angle from the diagonal plane.

❖ Applications
→ Fiber optics interchanges points
→ Distribution network
→ Server room

Features & benefits
→ Metal casing- anticorrosive protected
→ Cable bushing in back parts of line cables
→ Cable bushing in the front parts of patchcords
→ Patch panel installation on a back or front rack profile
→ Capacity up to
  → 48 fibers in 1U
  → 96 fibers in 2U
→ Cable bushing in patch panel are equipped in brush guards
→ Panel available rotating to left or right side of patch panel (depends on version)
→ Offers separated canal for patch cord cables
→ Possibilities termination line and local cables on aside or back of patch panel
→ Hinged flap of patch panel, protects patch cords against damages

FIBRAIN

Equipped rotational patch panel with side access PSR-A0

Equipped rotational patch panel with side access PSR-A0:

PSR-A0-XX-A-BC-DDEFG-HHIJKLL-MMO

XX – Height variant	01	1U (grey RAL 7035)
	02	2U (grey RAL 7035)
	B1	1U (black RAL 9005)
	B2	2U (black RAL 9005)

A – Shelf opening direction	R	right
	L	left

B – Cassette qty	0-4	

C – Cassette type	1	SCM-A-24H

DD – Adapters qty:	1-48 (dla 1U)	Unused ports are blinded
	1-96 (dla 2U)	

E – Adapter class:	1	Standard One-Piece
	2	Premium One-Piece with internal shutter
	3	Premium Super One-Piece
	4	Premium Super One-Piece with internal shutter

F – Adapter type:	1	SC
	2	SCA
	3	E2
	4	E2A

G – Transmission	1	SM
	2	MM (beige @SC, black @E2000)
	3	MM OM3 (aqua @SC)
	4	MM OM4 (violet @SC)

HH – Pigtails qty	0-96	

I – Fiber type	A	G.652D
	B	G.655
	C	G.656
	D	G.657A1
	E	G.657A2
	F	G.657B2
	G	G.657B3
	H	MM OM1
	I	MM OM2
	K	MM OM3
	L	MM OM4

J – Connector type	1	SC
	2	SCA
	3	E2
	4	E2A

K – Pigtails grade	S	Silver
	G	Gold
	T	Titanium

LL – Color identification	01	for pigtails with yellow 0.9 mm buffer
	02	for pigtails with orange 0.9 mm buffer
	03	T TELECOM (acc. to IEC60304)
	04	T1 TELECOM (acc. to 60304/tab. 3 & ZN-11/TPSA-005-02)
	05	T2 TELECOM (acc. to EIA 598A)
	06	D DATACOM (acc. to DIN VDE 0888 & IEC 60304)
	07	D1 DATACOM (acc. to IEC 60304, TIA/EIA 598-A, TIA/EIA 598-C)

MM – Splice sleeve qty	0-96	

O – Splice sleeve type	1	45 mm

Example

PSR-A0-02-R-41-96311-96A1G01-961

Fibrain rotational patch panel with side access, right, equipped with 4 splice cassettes for 24 splice protectors, 96 Gold grade pitails terminated with SC PC connectors, 2m length on G.652D fiber, 96 Premium Super One-Piece SC PC adapters and 96 splice protectors 45 mm.

To order a non- standard option, please contact with our Sales Department.

Integrated patch panels for splitter FIBRAIN PZSP

PZSP

Technical specification

	PZSP
Height [mm]	1U (44 mm)
Width [mm]	19" (483 mm)
Depth [mm]	201/258*
Casing material	Powder painted steel

*In case of using PST-A1 telescopic patch panel with dedicated front plates

Ordering information

PZSP-G0-2-1-04132-P-F-EVEN-EMPTY	FIBRAIN 19" integrated patch panel, 1U, 4x 1x32, non-equipped
PZSP-G0-2-1-05116-P-F-EVEN-EMPTY	FIBRAIN 19" integrated patch panel, 1U, 5x 1x16, non-equipped
PZSP-G0-2-1-08108-P-F-EVEN-EMPTY	FIBRAIN 19" integrated patch panel, 1U, 8x 1x8, non-equipped
PZSP-G0-2-1-10104-P-F-EVEN-EMPTY	FIBRAIN 19" integrated patch panel, 1U, 10x 1x4, non-equipped
PZSP-G0-2-1-10102-P-F-EVEN-EMPTY	FIBRAIN 19" integrated patch panel, 1U, 10x 1x2, non-equipped
PZSP-G0-2-1-04132-P-F-EVEN-PSCA-PSCA	FIBRAIN 19" integrated patch panel, 1U, equipped with 4x 1x32 SC APC, 1.8 mm tube
PZSP-G0-2-1-05116-P-F-EVEN-PSCA-PSCA	FIBRAIN 19" integrated patch panel, 1U, equipped with 5x 1x16 SC APC, 1.8 mm tube
PZSP-G0-2-1-08108-P-F-EVEN-PSCA-PSCA	FIBRAIN 19" integrated patch panel, 1U, equipped with 8x 1x8 SC APC, 1.8 mm tube
PZSP-G0-2-1-10104-P-F-EVEN-PSCA-PSCA	FIBRAIN 19" integrated patch panel, 1U, equipped with 10x 1x4 SC APC, 1.8 mm tube
PZSP-G0-2-1-10102-P-F-EVEN-PSCA-PSCA	FIBRAIN 19" integrated patch panel, 1U, equipped with 10x 1x2 SC APC, 1.8 mm tube

Other equipment options and ordering codes are available in PON Catalogue

Examples of equipped patch panels

	1. PZSP-G0-2-1-0214-P-F-EVEN-SCA-SCA Fibrain integrated patch panel EVEN 19" 1U equipped with 2 splitters 1/4 SC APC and 10 Premium Super One-Piece SC APC SX adapters
	2. PZSP-G0-2-1-01132-P-F-EVEN-SCA-SCA Fibrain integrated patch panel EVEN 19" 1U equipped with 2 splitters 1/4 SC APC and 10 Premium Super One-Piece SC APC SX adapters

📄 Description

→ Integrated patch panels Fibrain PON facilitate easy management of passive elements installed in telecommunication and providers networks. Variety of products available and tailored solutions additional effects flexibility of PON systems and provides future extension of systems. Available casing of standard 19" dedicated for:

→ integrated splitters shelves for CATV operator

→ integrated splitters shelves FTTH

→ hybrid solutions

❖ Applications

→ WDM systems

→ Telecommunication networks

→ CATV networks

→ Optic amplifiers

→ Measuring equipment

↕ Features & benefits

→ Easy management of PON elements

→ Clear description of PON elements installed

→ Possible installation of 1U and 2U in 19"

→ Dedicated and hybrid solution

FIBRAIN

Integrated patch panels for splitter FIBRAIN PZSP

PZSP – configuration of 1U integrated patch panel

1x32
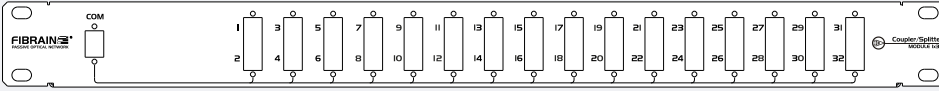
2x(1x8)

4x(1x2)

4x(1x4)

4x(1x8)

8x(1x2)

16x(1x2)

1x8

Integrated patch panels for splitter
FIBRAIN PZSP – 1U front plates
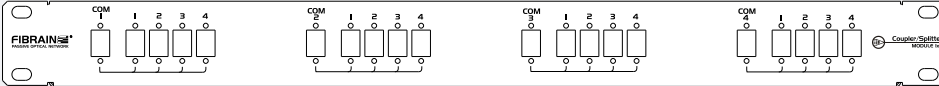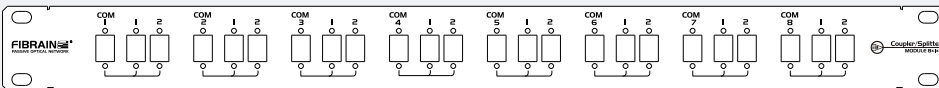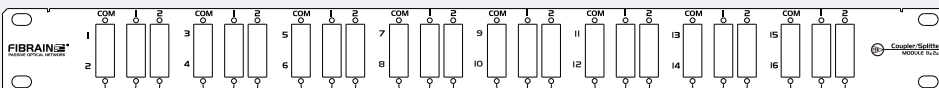
PZSP – configuration of 1U dedicated front plates for PST-A1

FB 2250

FB 2251

FB 2252
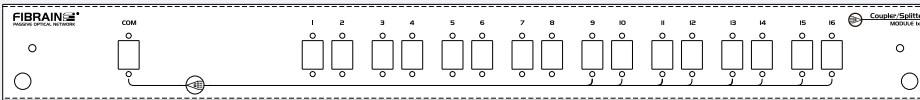
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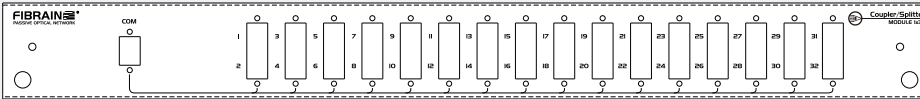
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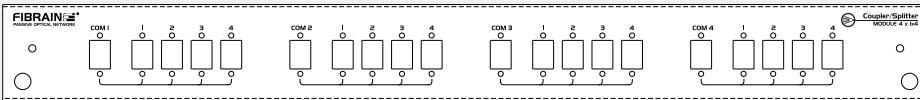
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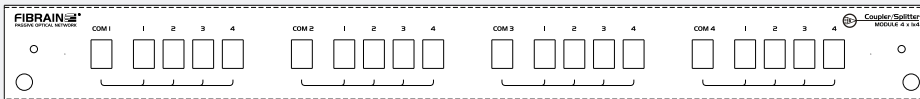
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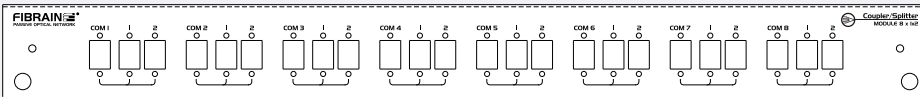
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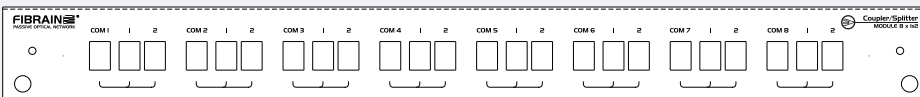
FIBRAIN

LGX solution for optical splitters

LGX solution

▤ Description

→ Fibrain LGX solutions facilitate easy management of optical passive elements installed in telecommunication and providers networks. Additional chief asset is very easy extension as well as flexibility of demanded configuration adjustment. LGX products offer possibility of mounting within one frame integrated FBT and PLC splitters, combiners.

Technical specification

	LGX1	LGX2
Height [mm]	100	
Width [mm]	156	
Depth [mm]	29	58
Mounting	19"	
Colour	grey RAL7035*	

*Other colors available on request

❖ Applications

→ WDM systems
→ Telecommunication networks
→ CATV networks
→ Optic amplifiers
→ Measuring equipment
→ Metropolitan networks

┼┼┼ Features & benefits

→ Easy management of PON elements
→ Clear description of PON elements installed
→ Easy extension & development
→ Dedicated and hybrid solution

Ordering information – examples

LGX1-G0-1-012-D-35-50-FC-FC	FIBRAIN coupler 1/2 50/50% 1310/1550 nm FC connectors LGX1
LGX1-G0-1-012-D-35-50-SCA-SCA	FIBRAIN coupler 1/2 50/50% 1310/1550 nm SC/APC connectors LGX1
LGX1-G0-1-012-D-35-70-SCA-SCA	FIBRAIN coupler 1/2 70/30% 1310/1550 nm SC/APC connectors LGX1
LGX1-G0-2-014-P-345-2525-E2A-E2A	FIBRAIN splitter PLC 1x4, fullband, G.657A, E2000APC connectors, LGX1
LGX1-G0-2-014-P-345-2525-SCA-SCA	FIBRAIN splitter PLC 1x4, fullband, G.657A, SC/APC connectors, LGX1

Other equipment options and ordering codes are available in PON Catalogue
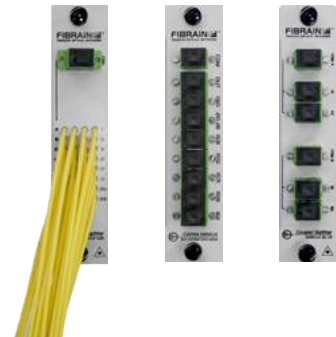
LGX1 solutions examples
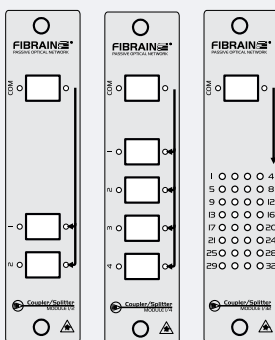
LGX2 solutions examples
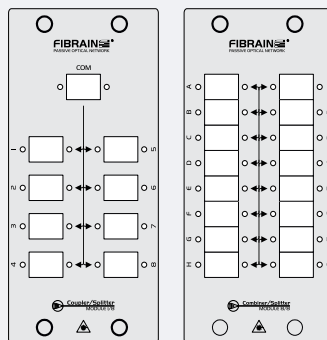
Other solutions available on request

Frame for LGX casing

SERIAL NUMBER	DESCRIPTION	
LGX-3U-14-P	FIBRAIN LGX Frame 3U 19" 14*LGX1	
LGX-3U-14-R	FIBRAIN LGX Frame 3U 19" 14*LGX1 recessed	
LGX-2U-6-P	FIBRAIN LGX frame 2U 19" 6*LGX1	
LGX-2U-6-R	FIBRAIN LGX frame 2U 19" 6*LGX1 recessed	
LGX-1U-3-P	FIBRAIN LGX frame 1U 19" 3*LGX1	
LGX-1U-3-R	FIBRAIN LGX frame 1U 19" 3*LGX1 recessed	

Frame dimensions available in DSH

FIBRAIN

PS 19" accessories
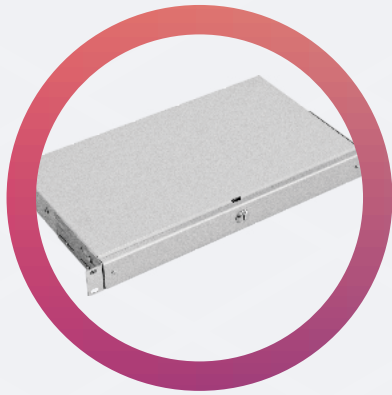
PS-19-1-TUB
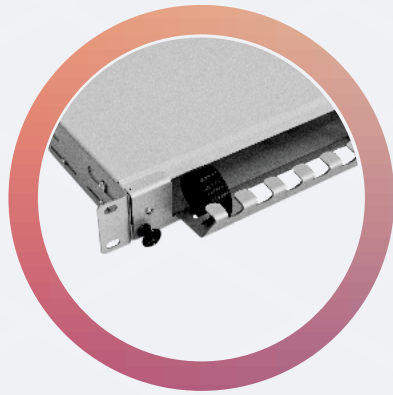
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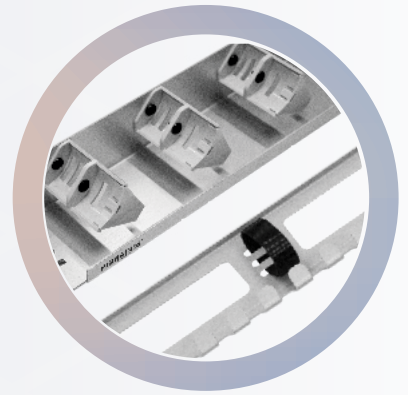
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FB2030G.V2P**
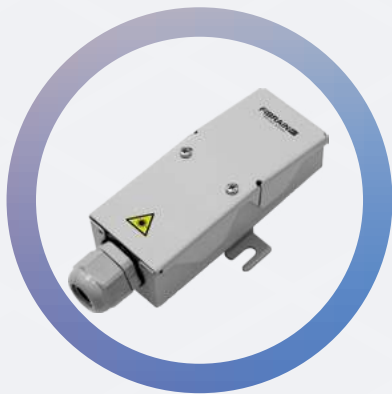
RT-01-xx
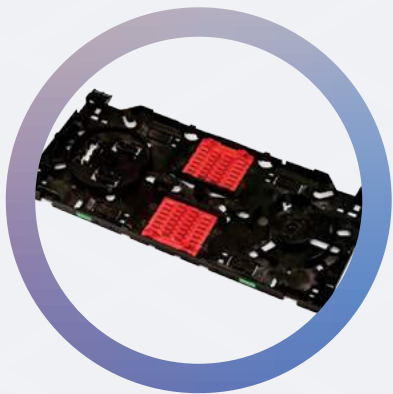
SCM-A-xx
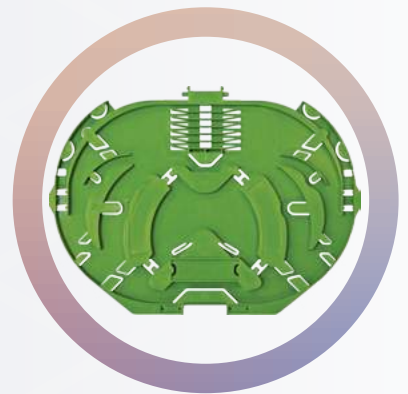
SCM-B-xx

ORG-VP-1U-B-V2

FB744x
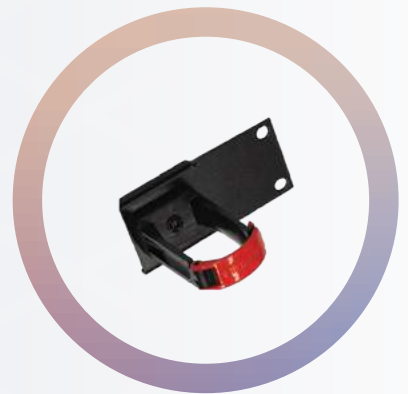
ORG-HP-1U-B-V2

Tubes reserve shelf

PS-19-1-TUB

Technical specification

	PS-19-1-TUB
Height [mm]	44 mm (1U)
Width [mm]	483 (19")
Depth [mm]	258
Casing material	Powder painted steel

Ordering information

PS-19-1-TUB	Fibrain tubes reserve shelf

☰ Description

→ Fibrain tubes reserve shelf offers simple and useful way of gathering and storage of fiber optic cable's tube. The shelf is equipped with telescopic rails, which provide a full opening to mount cables easily. Shelf's interior is equipped with a series of ribbing and perforation to provide easier management of fiber optic cable's tube.

❖ Applications

→ FTTH systems
→ Last mile distribution points
→ Last mile connection points

Features & benefits

→ Full opening on telescopic rails
→ Easy access to fiber optic cable's tube gathered
→ Faster installation at construction side
→ Shelf's interior facilitating installation and management

Patchcords reserve shelf

PS-19-1-PAT

Technical specification

	PS-19-1-PAT
Height [mm]	44 mm (1U)
Width [mm]	483 (19")
Depth [mm]	258
Casing material	Powder painted steel

Ordering information

PS-19-1-PAT	Fibrain patchcords reserve shelf

☰ Description

→ Fibrain patchcords reserve shelf offers simple and useful way of gathering and storage patchcords overlength. The shelf is equipped with telescopic rails, which provide a full opening. Front plate with possibility to mount patchcors using velcro tape. Shelf's interior is equipped with a series of ribbing and perforation to provide easier management and patchcord cables installation.

❖ Applications

→ FTTH systems
→ Last mile distribution points
→ Last mile connection points

Features & benefits

→ Full opening on telescopic rails
→ Easy access to patchcords gathered
→ Faster installation at construction side
→ Front plate facilitating installation and management

FIBRAIN

Horizontal fiber cable organizer

📄 Description

→ Fibrain horizontal fiber optic cable organizer is a key elements which facilitate patchcords' management, which are placed between fiber optic equipment in distribution cabinets. This organizer ensures clean and transparent room. Therefore, the organizer is made from anodized aluminium and easily detachable handles made from ABS.

Technical specification

	PS-ORG-1-PP
Height [mm]	44 mm (1U)
Width [mm]	483 (19")
Depth [mm]	65
Casing material	Anodized aluminium + ABS

❖ Applications

→ Key points in fiber optic networks
→ Distribution points of fiber optic networks
→ Server rooms

Ordering information

PS-ORG-1-PP	Fibrain horizontal fiber optic cable organizer

Features & benefits

→ Height 1U
→ Width 19"
→ Light and made of anodized aluminium housing
→ Easy patchcord's organization
→ Detachable handles facilitating cables placement

Fibrain patchcord management for PST-A1 telescopic patch panel

📄 Description

→ Fibrain patchcord management for PST-A1 telescopic patch panel offers simple and useful way of gathering and storage patchcords overlength. FB2030G.V2P is mounted on front plates of PST-A1 patch panel (there is no need to add extra 1U height). Front plate with possibility to mount patchcors using velcro tape.

Technical specification

	FB2030G.V2P
Height [mm]	35
Width [mm]	423 (19")
Depth [mm]	77
Casing material	Powder coated steel

❖ Applications

→ FTTH systems
→ Last mile distribution points
→ Last mile connection points

Ordering information

FB2030G.V2P	Fibrain patchcord management for PST-A1 telescopic patch panel

Features & benefits

→ Possibility of mounting on front plates of PST patch panel
→ Easy access to patchcords gathered
→ Faster installation at construction side
→ Front plate facilitating installation and management

Patchcords/cable's tube organizer

ORG-XX

19" Horizontal cable organizer
with easily-opened plastic handles

ORG-VP-1U-B-V2

Clip

4-6 holders

Horizontal organizer

Features
→ 19" mounitng
→ Powder painted steel
→ Equipped with 4 easily opened-handles
→ Possibility of installing 2 extra handles
→ Clear manufacturer marking
→ Possibility of using together with vertical organizers
→ Guarantee optimum cable arrangement

19" Vertical cable organizer
with easily-opened plastic handles

ORG-HP-1U-B-V2

Clip

4 holder positions

Vertical organizer

Features
→ 1U mounitng
→ Powder painted steel
→ Equipped with 1 easily opened-handle
→ Possibility of using holder in 4 positions
→ Clear manufacturer marking
→ Guarantee optimum cable arrangement

Velcro tape
16x200 10 pcs

Fibrain velcro tapes	
ORG-CT-16200-BK black	**ORG-CT-16200-W** white

Features
→ Material: velour
→ Guarantee optimum cable arrangement
→ Pack of 10 pcs
→ Width: 16 mm - protected against excessive tightening
→ Resistant to multiple opening and closing
→ Colours facilitate cable identification

FIBRAIN

Cable tube divider RT-01-xx

🗎 Description
→ Fibrain cable tube divider is specifically designed to provide branchings of fiber optic cables and guarantee cables' tube protection, which run from RT-01-xx cable tube divider mounted on a Distribution Frame or a Tube Overlength Drawer in signal distribution points, as well in server rooms.
→ Therefore, well-thought-out design provides easy and cost-effective method of mounting and cable installation.

❖ Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ Server rooms and cable manufacturing centers

⊞ Features & benefits
→ Metal housing, protected against corrosion
→ Capacity up to 288 fibers
→ Prepared for installation
→ Simple and clear management of fiber optic tubes

Technical specification

	RT-01-0310	RT-01-1205	RT-01-2405
Max. number of protective pipes	3	12	24
Max. diameter of protective pipe [mm]	10	5	5
Max. diameter of fiber optic cable [mm]	14	14	18
Max. number of cable tube divider installed on Distribution Frame	8	8	4
Dimensions of a cable tube divider (w)x(h)x(l) [mm]	68 (with mounting) x 46 x 123 (no cable gland)	68 (with mounting) x 46 x 123 (no cable gland)	122 (with mounting) x 53 x 162.5 (no cable gland)
Operating temperature	-20°C – +50°C	-20°C – +50°C	-20°C – +50°C
Type of housing material	Powder painted steel	Powder painted steel	Powder painted steel

A view of cable tube divider installed on distribution frame

Ordering information

RT-01-0310	Fibrain cable tube divider equipped for mounting 3 protective pipes 10 mm
RT-01-1205	Fibrain cable tube divider equipped for mounting 12 protective pipes 5 mm
RT-01-2405	Fibrain cable tube divider equipped for mounting 24 protective pipes 5 mm
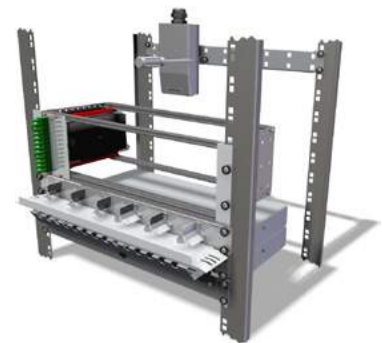
Additional accessories

DISTRIBUTION FRAME		
Distribution Frame for mounting cable tube divider	RT-L8-01-19	

PROTECTIVITE PIPES	
Protectivite pipe 10 mm	OR3F-MYDSN-10-10
Protectivite pipe 5 mm	OFPT-5.0-3.1-PP-WHT

FIBRAIN SCM-A-XX splice cassette

SCM-A-xx

Technical specification

	SCM-A-XX
Length	195 mm
Width	94 mm
Depth	9 mm
Capacity	up to 24 splices
Material	PC + ABS

Ordering information

SCM-A-00	Fibrain splice cassette with a possibility to mount Alubox splitters
SCM-A-12H	Fibrain splice cassette with a handle for 12 heat shrink splice protection sleeves
SCM-A-24H	Fibrain splice cassette with handles for 24 heat shrink protection sleeves

Cassette with an option to mount splitters

Cassette with an option for 12 fusion splices

Cassette with an option for 24 fusion splices
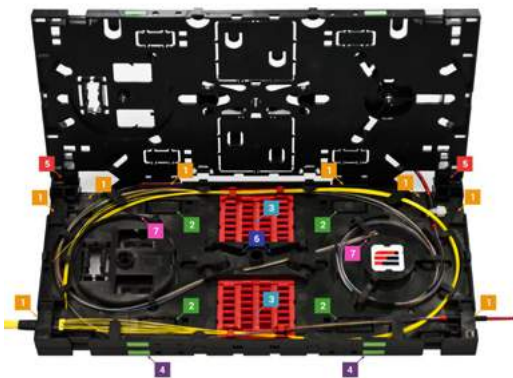
1	Various arrangements of side entry ports
2	Various arrangements of lower entry ports
3	Exchangeable handles for splices
4	Identification icons
5	Hinges ensuring multi-storage of cassettes
6	A change of direction in placing a fiber
7	Possibility of storage extra length of fiber

Description

→ Fibrain SCM-A-XX fiber optic splice cassette is an element used in fiber optic equipment such as cabinets, fiber optic modules to guarantee storage of extra length of fiber and protect splices in specifically designed handles. Optimized shape of cassette facilitates effective placement of fibers. Therefore, thanks to exchangeable handles for splice protection sleeves, the cassette is suitable for various techniques of splicing fibers. Furthermore, the tubes' handles and in-built hinges facilitate mounting the cassettes and their multi-storage placement.

❖ Applications

→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks

Features & benefits

→ Capacity up to max. 24 splices
→ Simple access to fibers' organizer
→ Exchangeable handles for splices
→ Combining cassettes with the use of in-built hinges
→ Possibility of changing a fiber placement
→ Facilitated mounting of fiber optic cable's tube
→ Possibility of placing a fiber from a lower side of the cassette
→ Easy identification of a cassette with the use of colorful icons
→ Possibility of mounting splitters in Alubox housing

Additional accessories

Serial no.	Description
FB7422	Splice protector 45 mm

FB7422

FIBRAIN

FIBRAIN SCM-B-12H splice cassette

Technical specification

	SCM-B-12H
Length [mm]	148
Width [mm]	109
Depth [mm]	5.5
Capacity [mm]	max. 12 splices

1	Side input/output ports
2	Built-in handles for splicers
3	Identification icons
4	Labeling field
5	Possibility of mount. optical splitter in Alubox casing
6	A change of direction in placing a fiber
7	Possibility of storage extra length of fiber
8	Mounting place for tube of the fiber optic cable
9	Mounting place for fiber holder
10	Side handles
11	Locking latches

Ordering information

SCM-B-12H	Fibrain oval splice cassette with build-in handle for 12 heat shrink protection sleeves and possibility to mount Alubox optical splitter

SCM-B-12H cassette

Splice cassette SCM-B-12H with 1x8 optical splitter in Alubox housing

Description
→ Fibrain SCM-B-12H fiber optic splice cassette is an element used in fiber optic equipment such as cabinets, fiber optic modules to guarantee storage of extra length of fiber and protect splices in specifically designed handles. Optimized thickness and oval shape of cassette facilitates effective placement of fibers. Splice cassette SCM-B-12H has possibility to mount Alubox optical splitter.

Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks

Features & benefits
→ Capacity up to max. 12 splices
→ Simple access to fibers' organizer
→ Possibility of changing a fiber placement
→ Labeling field
→ Facilitated mounting of fiber optic cable's tube
→ Easy identification of a cassette with the use of colorful icons
→ Possibility of mounting splitters in Alubox housing

Additional accessories

Serial no.	Description
FB7422	Splice protector 45 mm

FB7422

Description
SCM-B-12H splice cassette holder

COMING SOON

Heat-shrink splice protection sleeves

SPLICE PROTECTION

Technical specification

	FB7441	FB7442
Length of splice protector after shrink L [mm]	60	45
Length of wire reinforcement L_d [mm]	57	41
Diameter of splice protector after shrink D [mm]	2	2
Diameter of wire reinforcement D_d [mm]	0.75	0.75
Diameter of the through hole before shrink d [mm]	1.2	1.2

Ordering information

FB7441	Heat-shrink splice protection sleeves 60 mm
FB7442	Heat-shrink splice protection sleeves 45 mm

Also available

FB7445 ANT crimp splice prtector

Description

→ Fibrain FB7442 heat-shrink splice protection sleeves provide high protection during splicing process. They can be characterized by small inner diameter (diameter after shrink D=2.0mm), optimal length and fast installation. Therefore, the heat-shrink sleeve is strengthened with a steel pin of 0.75 mm diameter and the same coefficient of heat expansion as optical fiber. It prevents from longitudinal stresses, which cause an increase of insertion and reflection loss. Fibrain heat-shrink sleeves do not cause any loss of optical power as they protect against mechanical damages, pollution and weather conditions. Therefore, the outer material guarantees sustainability and resistance to stretching and puncture.

Applications

→ Telecommunications systems
→ FTTH networks
→ Access and structured cable networks
→ FTTx networks
→ PON networks
→ CATV networks

Features & benefits

→ Small outer diameter
→ Strengthened by a pin of Dd = 0.75 mm diameter
→ In accordance with UL224, MIL-I-23053, GR-1380-CORE, ZN-96 TPSA-006 norms
→ Transparent sleeve
→ Max. shrink time: 40 s
→ In accordance with RoHS Directive

FIBRAIN

Wall mounted distribution indoor

Topology of fiber network also provides the installation of fiber optic cable ends in wall cabinets that are solutions specifically designed for mounting directly indoor.

Quite often, these are low- fiber capacity solutions and used anywhere where there is no possibility or purpose of mounting rack cabinet. Therefore, this type of solutions are frequently used in FTTx networks.

Indoor cabinet

Well

Primal duct

FTTH IFDB-D0-x cabinet

IFDB-D0-x

📄 Description

→ IFDB-D0-x cabinet is a multi-storey distribution point for optical fibers installed with the use of FTTH fiber optic system. Two-piece cabinet design provides flexible organization of the fibers and DROP cable inside a cabinet. It is equipped with a demountable organizer with a new splice cassette. The cabinet is equipped with the rack for 12 adapters of SC simplex opening, which provides the possibility of installing patchcords terminated with connectors and the rack for cable stock. Thanks to numerous stampings we can arrange fibers which are taken from splitter/ splitters and drop cables. Lead-in cables provide placing the bundle of drop cables and internal cable in a flexible way. There is also a possibility of placing a cable/cables by using openings in the side walls of the cabinet. The cabinet capacity is up to 12 splices.

❖ Applications

→ Distribution point of the FTTH network inside the building

Technical specification

	IFDB-D0-X
Max. number of fibers	12
Max. number of splices	12
Max. number of users	12
Max. number of adapters	12
Max. cable diameter [mm]	15
Max. number of entry cables	6
Cabinet dimensions (width)x(height)x(depth) [mm]	305x205x40
Type of easy access cables	Distribution cables, Drop Cables, Easy Access Cables, Breakout Cables, Mini Breakout Cables
Working temperature	-20°C - +50°C

⊞ Features & benefits

→ Compact, a wall cabinet providing the installation on the small area inside the apartment-buildings or offices

→ Available in a version for 48 subscribers

→ Prepared to install the splitters

→ Prepared to place cables and micropipes

→ Possible welds: cable lines – splitter, cable line – cable line, splitter – drop cable, EAC cable – splitter

→ Optional stock cable in frame

→ Cabinet mounting with the use of wall plugs

Additional equipment

Adapters:	according to CONNECTIVITY'16 catalogue
Splitters:	FPLC-xx in AluBox housings
Pigtails:	according to CONNECTIVITY'16 catalogue

Ordering information

IFDB-D0	Fibrain IFDB cabinet in the D0 version with lead-in cables and a 12-splice cassette
IFDB-D0-12-12-2-13	Fibrain IFDB cin the D0 version equipped with 12 adapters and SCA pigtails, one PLC 1x8 splitter in the AluBox housing

Number of installed adapters:	1-12
Number of installed pigtails:	1-12
Type of an adapter:	1 – SC 2 – SCA 3 – E2 4 – E2A
Splitters qty: first digit	1 – one, 2 – two, etc;
Second digit (splitter division):	1 – 1:2, 2 – 1:4, 3 – 1:8, 4 – 1:16;

FIBRAIN

WALL MOUNTED DISTRIBUTION INDOOR

IFDB-E0 FTTH cabinet

IFDB-E0

Description

→ IFDB-E0-x cabinet is a multi-storey distribution point for optical fibers installed with the use of FTTH fiber optic system. Cabinet design provides flexible organization of the fibers and DROP cable inside a cabinet. It is equipped with a demountable organizer with a new splice cassette. The cabinet is equipped with a demountable plate 12 adapters of SC simplex footprint adapters, which provides the possibility of installing patchcords terminated with connectors. IFDB-E0 cabinet is equipped with 4 handles for making cables stock. Thanks to special handles we can arrange fibers which are taken from splitter/ splitters and drop cables. Lead-in cables provide placing the bundle of drop cables and internal cable in a flexible way. There is also a possibility of placing a cable/cables by using openings in the side walls of the cabinet. The cabinet capacity is up to 24 splices.

❖ Applications

→ Distribution point of the FTTH network inside the building

┼┼┼ Features & benefits

→ Compact, a wall cabinet providing the installation on the small area inside the apartment-buildings or offices

→ Available in a version for 48 subscribers

→ Prepared to install the splitters

→ Prepared to place cables and micropipes

→ Possible welds: cable lines – splitter, cable line – cable line, splitter – drop cable, EAC cable – splitter

→ Optional stock cable in frame

→ Cabinet mounting with the use of wall plugs

Technical specification

	IFDB-E0
Max. number of fibers	24
Max. number of splices	24
Max. number of adapters	12 @SC SX footprint
Max. cable diameter [mm]	11
Max. number of entry cables	6
Cabinet dimensions (width)x(height)x(depth) [mm]	253x250x72
Type of easy access cables	Distribution cables, Drop Cables, Easy Access Cables, Breakout Cables, Mini Breakout Cables
Working temperature	-20°C - +50°C
Type of housing material	Powder painted steel

Additional equipment

Adapters:	according to CONNECTIVITY'16 catalogue
Splitters:	FPLC-xx in AluBox housings
Pigtails:	according to CONNECTIVITY'16 catalog
Splice cassette	SCM-A-24H

Ordering information

IFDB-E0	Fibrain IFDB cabinet in the E0 version

Equipped version of IFDB-E0 cabinet according to DSH – please contact with our Sales Department.

FIBRAIN

FTTH IFDT-B0-x cabinet

📋 Description

→ IFDT-B0-x cabinet is specifically designed to serve as a distribution point for optical fibers installed with the use of FTTH networks, It provides optimized placement of fibers inside the cabinet. Therefore, it is divided into two parts: a user and cable line, which are separated by the locks. The user part is equipped with an area to place spare optic fibers connectors which are disconnected. Thanks to numerous curves, we are able to provide optimized placement of the fibers, which come from a splitter/ splitters and the tubes from the cable line. Moreover, the splitters can be mounted easily and quickly inside the cabinet, regardless of their size. Additionally, entry ports provide the possibility to place installation pipes, which are used in in-house installations. The cabinet's capacity is varied from the switching field which is a demountable element and can have from 12 up to 48 fibers. The internal part of the cabinet has an organizer for documents. An additional cable hanger for fiber optic and Drop cable is an optional element of the IFDT cabinet which is mounted on the back side of the cabinet.

❖ Applications

→ Distribution point of the FTTH network

Technical specification

	IFDT-B0-24-X	IFDT-B0-48-X
Max. number of fibers	48	48
Max. number of splices qty	48	48
Max. number of users	24	48
Max. cable diameter [mm]	18,6	18,6
Cabinet dimensions (width)x(height)x(depth) [mm]	390x315x110(175)*	270x315x110(175)*
Type of easy access cables	DropCables, DropTube, Easy Access Cable	DropCables, DropTube, Easy Access Cable
Working temperature	-20°C - +50°C	-20°C - +50°C
IP protection	IP54	IP54
Housing type	Powder painted steel	Powder painted steel

*the cabinet's depth with the cable stock frame

Features & benefits

→ Thanks to optimized size of cabinet, it can be mounted inside offices and houses

→ Available in 2 versions for 24, 48 users

→ Two-part design- line and users

→ Prepared to install splitters

→ Prepared to place brand new cables and micropipes

→ Locks protect the cabinet's parts;

→ Possibility of performing the splices: cable lines- splitter, cable lines - cable lines, splitter – Drop cables, EAC cable – splitter

→ An optional cable/cables hanger placed inside the cabinet

→ Mounting the cabinet with a use of nail expansion anchors

Additional equipment

Adapters	according to CONNECTIVITY'16 catalogue
Cassettes:	FB7401PP, FB7401.2PP + clips to connect the cassettes FB7401.5 (4pcs in case of connecting two cassettes)
Splitters:	FPLC-xx in BlackBox and AluBox housing
Cable glands:	DŁxx depending on the diameter of the inserted cables
Cable hanger:	SZB-A-IFDT-B0

FIBRAIN

FTTH IFDT-B0-x cabinet ordering information

IFDT-B0-x

Ordering information

IFDT-B00-48	Fibrain IFDT cabinet of B0 version with a panel for 48 SC simplex adapters, 2 cassettes 24 splices, not equipped, without a cable hanger
IFDT-B0Z-48	Fibrain IFDT cabinet of B0 version with panel for 48 SC simplex adapters, 2 cassettes 24 splices, not equipped, without a cable hanger
SZB-A-IFDT-B0	Fibrain cable hanger for IFDT-B00 cabinet
IFDT-B0Z-24-48-2-32-1125-0DT-B0Z-24-48-2-32-1125-0	Fibrain IFDT cabinet of B0 version with a 48-port panel, equipped with 48 SCA adapters, 3 cassettes of 24 splices, 1x32 splitter in a Blackbox housing terminated with connectors and a cable hanger

Number of ports in a panel:	24 ports
	48 ports
Number of installed adapters:	1-48 (depending on number of ports)
Adapter type:	1 – SC, 2 – SCA, 3 – E2, 4 – E2A, 5 – LC DX, 6 – LCA DX
Cassettes	
first digit (number):	1 – one, 2 –two, 3 – three;
second digit (cassette type):	1 – 12 splices, 2 – 24 splices
Spliters:	
first digit (number):	1 – one, 2 – two, 3 – three, etc;
second digit (splitters terminated with connectors):	0 – not terminated, 1 – terminated with connectors in accordance with adapter standard;
third digit (splitter housing):	1 – AluBox housing, 2 – BlackBox housing;
fourth digit (spliter divison):	1 – 1:2, 2 – 1:4, 3 – 1:8, 4 – 1:16, 5 – 1:32, 6 – 1:64;
Number of cable glands:	1-8

Description

→ IFDT-B0-x cabinet is specifically designed to serve as a distribution point for optical fibers installed with the use of FTTH networks, It provides optimized placement of fibers inside the cabinet. Therefore, it is divided into two parts: a user and cable line, which are separated by the locks. The user part is equipped with an area to place spare optic fibers connectors which are disconnected. Thanks to numerous curves, we are able to provide optimized placement of the fibers, which come from a splitter/ splitters and the tubes from the cable line. Moreover, the splitters can be mounted easily and quickly inside the cabinet, regardless of their size. Additionally, entry ports provide the possibility to place installation pipes, which are used in in-house installations. The cabinet's capacity is varied from the switching field which is a demountable element and can have from 12 up to 48 fibers. The internal part of the cabinet has an organizer for documents. An additional cable hanger for fiber optic and Drop cable is an optional element of the IFDT cabinet which is mounted on the back side of the cabinet.

Applications

→ Distribution point of the FTTH network

Features & benefits

→ Thanks to optimized size of cabinet, it can be mounted inside
→ offices and houses;
→ Available in 2 versions for 24, 48 users;
→ Two-part design- line and users;
→ Prepared to install splitters;
→ Prepared to place brand new cables and micropipes;
→ Locks protect the cabinet's parts;
→ Possibility of performing the splices: cable lines- splitter, cable lines - cable lines, splitter – Drop cables, EAC cable – splitter;
→ An optional cable/cables hanger placed inside the cabinet;
→ Mounting the cabinet with a use of nail expansion anchors

FTTH IFDT-C0-x cabinet

IFDT-C0-x

📄 Description

→ The IFDT-C0-x cabinet is dedicated as a distribution point for the optical fibers installed with the use of FTTH optical fibers systems.

→ It provides the organisation of the fibers inside the cabinet in a economic and a flexible way. Splitters can be assembled quickly in the cabinet, regardless of their mountings. Entrance ports provide the possibility to organise installation pipes used in the indoors installations. Inside the cabinet 48 fibers can be placed. The internal part of the cabinet is equipped with a document pocket. An optional element is an extra frame with the place for the line and drop cable stock, mounted at the back of the cabinet.

❖ Applications

→ Distribution point of the FTTH network inside the building

Technical specification

	IFDT-C0-X
Max. number of fibers	48
Max. number of splices qty	48
Max. number of users	48
Max. cable diameter [mm]	18,6
Cabinet dimensions (width)x(height)x(depth) [mm]	270x315x110(175)*
Type of easy access cables	DropCables, DropTube, Easy Access Cable
Working temperature	-20°C - +50°C
IP protection	IP54
Housing type	Powder coating steel

*the cabinet's depth with the cable stock frame

Features & benefits

→ Compact, a wall cabinet providing the installation on the small area inside the apartment-buildings or offices

→ Available in a version for 48 subscribers

→ Prepared to install the splitters

→ Prepared to place cables and micropipes

→ Possible welds: cable lines – splitter, cable line – cable line, splitter – drop cable, EAC cable – splitter

→ Optional stock cable in frame

→ Cabinet mounting with the use of wall plugs

Additional equipment

Cassettes:	FB7401PP, FB7401.2PP + clips connecting the cassettes FB7401.5 (4 pieces for connecting two cassettes)
Splitters:	FPLC-xx in BlackBox and AluBox housings
Cable gland:	DŁxx depending on the cable diameter
Cable stock frame	SZB-A-IFDT-C0

Ordering information

IFDT-C00	Fibrain IFDT cabinet C0 version, not-equipped, without the cable stock frame
IFDT-C0Z	Fibrain IFDT cabinet C0 version, not equipped, with a cable stock frame
SZB-A-IFDT-C0	Fibrain Stock frame for the IFDT-C0 cabinet
IFDT-C0Z-12-124-0	Fibrain IFDT cabinet C0 version, equipped with a cassette of 24 welds, splitter 1x16 a BlackBox housing with not-terminated plugs and a cable stock frame

Cassettes	
first digit (number):	1 – one, 2 – two, 3 – three
second digit (cassette's type):	1 – 12 welds, 2 – 24 welds
Splitters:	
first digit (number):	1 – one, 2 – two, 3 – three, etc;
second digit (splitter's houisng):	1 – AluBox housing type, 2 – BlackBox housing type;
third digit (splitter's division):	1 – 1:2, 2 – 1:4, 3 – 1:8, 4 – 1:16, 5 – 1:32, 6 – 1:64;
Cable glands	
Number of cable glands	1-8 cable glands

FIBRAIN

IFDT-D0-x FTTH cabinet

Technical specification

	IFDT-D0-X
Max. number of fibers in one module	12
Max. number of welds in one module	12
Max. number of SC SX footprint in one module	12
Max. number of modules in the cabinet	up to 8
Max. cable diameter [mm]	11
Cabinet dimensions (width)x(height)x(depth) [mm]	324x354x140
Type of easy access cables	DropCables, DropTube, Easy Access Cable
Working temperature	-20°C - +50°C
Housing type	Powder coating steel

Additional equipment

Adapters:	according to CONNECTIVITY'16 catalogue
Splitters:	FPLC-xx in AluBox housings
Pigtails:	according to CONNECTIVITY'16 catalogue
Equipped modules	according to DSH

Ordering information

IFDT-D0	Fibrain IFDT cabinet in the D0 version

Equipped version of IFDT-D0 cabinet according to DSH – please contact with our Sales Department.

Description

→ The IFDT-C0-x cabinet is dedicated as a distribution point for the optical fibers installed with the use of FTTH optical fibers systems. It provides the organisation of the fibers inside the cabinet in a economic and a flexible way. The IFDT-D0 cabinet allows to mounting modules, which can be adapted to the needs of the user and the networks. Inside the cabinet up to 8 modules can be placed. Modules can be equipped with fiber optic adapters, product from FIBRAIN Multipatchcords solution, optical splitters and in the "spliced version" (with pigtails, splice protectors and holders for splice protectors). Entrance ports provide the possibility to organise installation pipes used in the indoors installations. The IFDT-D0 cabinet has a separate section, which offers simple and useful way of gathering and storage extra length of line cables (5m of Ø10 mm cables). Cabinet is equipped with extra handles which allows to storage extra length of pigtails as well as the cables tube. The cabinet is characterized by high modularity and flexibility.

Applications

→ Distribution point of the FTTH network inside the building

Features & benefits

→ Compact, a wall cabinet providing the installation on the small area inside the apartment-buildings or offices

→ Prepared to install up to 8 modules with possibility of mount different type of adapters (SC SX and DX footprint)

→ Prepared to install the splitters

→ Separate section for storage extra length of the line cables

→ Handles for gathering extra length of pigtails and cables tube

→ Possible welds: cable lines – splitter, cable line – cable line, splitter – drop cable, EAC cable – splitter

→ High modularity

→ Flexibility

IFDT-D0-x FTTH cabinet

IFDT-D0 features

IN/OUT
Ø40 mm to stave in

Powder coated steel housing

Demountable door

Cable reserve

Modularity
SD modules max. 8 pcs

Demountable section

Cables tube organizer

📄 Description
→ The IFDT-C0-x cabinet is dedicated as a distribution point for the optical fibers installed with the use of FTTH optical fibers systems. It provides the organisation of the fibers inside the cabinet in a economic and a flexible way. The IFDT-D0 cabinet allows to mounting modules, which can be adapted to the needs of the user and the networks. Inside the cabinet up to 8 modules can be placed. Modules can be equipped with fiber optic adapters, product from FIBRAIN Multipatchcords solution, optical splitters and in the "spliced version" (with pigtails, splice protectors and holders for splice protectors). Entrance ports provide the possibility to organise installation pipes used in the indoors installations. The IFDT-D0 cabinet has a separate section, which offers simple and useful way of gathering and storage extra length of line cables (5m of Ø10 mm cables). Cabinet is equipped with extra handles which allows to storage extra length of pigtails as well as the cables tube. The cabinet is characterized by high modularity and flexibility.

❖ Applications
→ Distribution point of the FTTH network inside the building

╫ Features & benefits
→ Compact, a wall cabinet providing the installation on the small area inside the apartment-buildings or offices
→ Prepared to install up to 8 modules with possibility of mount different type of adapters (SC SX and DX footprint)
→ Prepared to install the splitters
→ Separate section for storage extra length of the line cables
→ Handles for gathering extra length of pigtails and cables tube
→ Possible welds: cable lines – splitter, cable line – cable line, splitter – drop cable, EAC cable – splitter
→ High modularity
→ Flexibility

FIBRAIN

Wall and aerial mounted distribution outdoor

The topology of fiber optic network sometimes defines fiber concentration points in outdoor cabinets installed on outside walls or (in case of aerial network) - on poles

Outdoor solutions can be also used to FTTx network construction, like indoor cabinets

Outdoor cabinet

Aerial network

Primal duct

WALL AND AERIAL MOUNTED DISTRIBUTION OUTDOOR

Pole Mounting Distributor OBP-S2

📄 Description

→ Fibrain Pole Mounting Distributor is specifically designed for indoor and outdoor FTTH networks and can contain max 144 fibers and 24 adapters for splitters and drop cable ends. The use of a cassette guarantees the assembly of mechanical splices and splitters. Therefore, a fiber optic closure is a perfect solution as a fiber distribution point. Thus, the outer housing is specifically constructed for FTTH solutions, which provides various possibilities to organize fibers and splitters. Due to a cover, the closure can be opened at an 120°angle, which facilitates an access to an inside content during installation. The closure is easily closed and, if necessary, can have extra protection. Cassettes and splitters are ordered separately.

Technical specification

	OBP-S2
Max. number of fibers	144
Max. number of splices	144
Max. number of subscribers	24
Max. number of adapters in an organizer	24 (option)
Type of an adapter in an organizer	SC SX/E2000 SX
Fiber optic closure dimensions (w)x(h)x(d) [mm]	255x400x86
Working temperature	-40°C to +50°C
Housing material	Thermoplastics
Fiber optic cassette material	Polycarbonate
Protection level	IP54
Housing colour	RAL 7035

❖ Applications

→ Outdoor distribution point of FTTH networks
→ Local networks
→ Last mile networks

Features & benefits

→ Thermoplastics construction guarantees high mechanical durability
→ Organizer with rotated cassettes
→ Handles for drop cables and fiber optic cables
→ Organizer for 24 adapters
→ Space 12 cassettes for 12 splices each in an organizer
→ Possibility of performing the splices: cable lines – splitter, cable lines – cable lines
→ Easy access

Additional accessories

BPEO-T-1S-12F (single slot for 12 fiber)

BPEO-T-2S-12F-1SPL with an option of mounting a splitter in Alubox housing

SZ-D-S12

OBP-S2 fiber optic closure's organizer

Additional accessories

Description	
OBP-S1-AP-12-SC-SX-V2	Adapter organizer
Splitters	FPLC-xx in Alubox casing
Pigtails	According to CONNECTIVITY '16 catalogue
Adapters	According to CONNECTIVITY '16 catalogue

FIBRAIN

Pole Mounting Distributor OBP-S2

Ordering syntax for equipped OBP-S2 closure

OBP-S2-AABC-DDEFGHH-IIJ-KLMN-O

AA – Adapters qty		0-24
B – Adapter class	**1 –**	Standard One-Piece (applies to E2000/E2000 APC adapters too)
	2 –	Premium One-Piece with internal shutter
	3 –	Premium Super One-Piece
	4 –	Premium Super One-Piece with internal shutter
C – Adapter type	**0 –**	none
	1 –	SC
	2 –	SCA
	3 –	E2
	4 –	E2A

DD – Pigtails qty		0-24
E – Fiber type	**A –**	G.652D
	B –	G.655
	C –	G.656
	D –	G.657A1
	E –	G.657A2
	F –	G.657B2
	G –	G.657B3
	H –	MM OM1
	I –	MM OM2
	K –	MM OM3
	L –	MM OM4
F – Connector type	**1 –**	SC
	2 –	SCA
	3 –	E2
	4 –	E2A
G – Pigtails grade	**S –**	Silver
	G –	Gold
	T –	Titanium
HH – Color identification	**01 –**	for pigtails with yellow 0.9 mm buffer
	02 –	for pigtails with orange 0.9 mm buffer
	03 –	T TELECOM (according to IEC60304)
	04 –	T1 TELECOM (according to 60304/tab. 3 & ZN-11/TPSA-005-02)
	05 –	T2 TELECOM (according to EIA 598A)
	06 –	D DATACOM (according to DIN VDE 0888 & IEC 60304)
	07 –	D1 DATACOM (according to IEC 60304, TIA/EIA 598-A, TIA/EIA 598-C

II - Cassette qty		0-12
J – Cassette type:	**0 –**	none
	1 –	BPEO-T-1S-12F (max. 12)
	2 –	BPEO-T-2S-12F-1SPL (max. 6)

Cassette in BPEO-T-2S-12F version occupies one port in organizer, cassette in BPEO-T-2S-12F-1SPL version occupies two ports in organizer. In the case of the use of both types of cassettes please consider the capacity of the organizer and occupancy of cassettes.

K – Splitters qty	**1 –**	none
	2 –	one
	3 –	two
	4 –	three
L – Split of 1st splitter:	**0 –** none; **1 –** 1:2; **2 –** 1:4; **3 –** 1:8	
M – Split of 2nd splitter:	**0 –** none; **1 –** 1:2; **2 –** 1:4; **3 –** 1:8	
N – Split of 2nd splitter:	**0 –** none; **1 –** 1:2; **2 –** 1:4; **3 –** 1:8	
O – Mounting handle with a rack:	**1 –**	none
	2 –	SZ-D-S12

Example

OBP-S2-2412-24A2G01-121-3333-2

Fibrain OBP-S2 pole mounting distributor equipped with 24 Standard One-Piece SC APC adapters, 24 Gold Grade pigtails on G.652D fiber, 2 m length, 12 splice cassettes BPEO-T-1S-12F type, 3 splitters with 1x8 split and one SZ-D-S12 mounting handle

To order a non- standard option, please contact with our Sales Department.

Pole Mounting Distributor OBP-S3

📄 Description

→ Fibrain Pole Mounting Distributor is specifically designed for indoor and outdoor FTTH networks and can contain max 144 fibers and 48 adapters for splitters and drop cable ends. The use of a cassette guarantees the assembly of mechanical splices and splitters. Therefore, a fiber optic closure is a perfect solution as a fiber distribution point. Thus, the outer housing is specifically constructed for FTTH solutions, which provides various possibilities to organize fibers and splitters. Due to a cover, the closure can be opened at an 120°angle, which facilitates an access to an inside content during installation. The closure is easily closed and, if necessary, can have extra protection. Cassettes and splitters are ordered separately.

❖ Applications

→ Outdoor distribution point of FTTH networks

→ Local networks

→ Last mile networks

Technical specification

	OBP-S3
Max. number of fibers	144
Max. number of splices	144
Max. number of subscribers	48
Max. number of adapters in an organizer	48
Type of an adapter in an organizer	SC SX/ E2000 SX
Fiber optic closure dimensions (w)x(h)x(d) [mm]	255x400x146
Working temperature	-40°C to +50°C
Housing material	Thermoplastics
Fiber optic cassette material	Polycarbonate
Protection level	IP54
Housing colour	RAL 7035

📊 Features & benefits

→ Thermoplastics construction guarantees high mechanical durability

→ Organizer with rotated cassettes

→ Handles for drop cables and fiber optic cables

→ Organizer for 48 adapters

→ Space 12 cassettes for 12 splices each in an organizer

→ Possibility of performing the splices: cable lines – splitter, cable lines – cable lines

→ Easy access

Additional accessories

BPEO-T-1S-12F (single slot for 12 fiber)

BPEO-T-2S-12F-1SPL with an option of mounting a splitter in Alubox housing

Additional accessories

Description	
OBP-S1-AP-12-SC-SX-V2	Adapter organizer
Splitters	FPLC-xx in Alubox casing
Pigtails	According to CONNECTIVITY '16 catalogue
Adapters	According to CONNECTIVITY '16 catalogue

FIBRAIN

Pole Mounting Distributor OBP-S3

Ordering syntax for equipped OBP-S3 closure

OBP-S3-AABC-DDEFGHH-IIJ-KLMN-O

AA – Adapters qty	0-48	
B – Adapter class	1 –	Standard One-Piece (applies to E2000/E2000 APC adapters too)
	2 –	Premium One-Piece with internal shutter
	3 –	Premium Super One-Piece
	4 –	Premium Super One-Piece with internal shutter
C – Adapter type	0 –	none
	1 –	SC
	2 –	SCA
	3 –	E2
	4 –	E2A

DD – Pigtails qty	0-48	
E – Fiber type	A –	G.652D
	B –	G.655
	C –	G.656
	D –	G.657A1
	E –	G.657A2
	F –	G.657B2
	G –	G.657B3
	H –	MM OM1
	I –	MM OM2
	K –	MM OM3
	L –	MM OM4
F – Connector type	1 –	SC
	2 –	SCA
	3 –	E2
	4 –	E2A
G – Pigtails grade	S –	Silver
	G –	Gold
	T –	Titanium
HH – Color identification	01 –	for pigtails with yellow 0.9 mm buffer
	02 –	for pigtails with orange 0.9 mm buffer
	03 –	T TELECOM (according to IEC60304)
	04 –	T1 TELECOM (according to 60304/tab. 3 & ZN-11/TPSA-005-02)
	05 –	T2 TELECOM (according to EIA 598A)
	06 –	D DATACOM (according to DIN VDE 0888 & IEC 60304)
	07 –	D1 DATACOM (according to IEC 60304, TIA/EIA 598-A, TIA/EIA 598-C

II - Cassette qty	0-12	
J – Cassette type:	0 –	none
	1 –	BPEO-T-1S-12F (max. 12)
	2 –	BPEO-T-2S-12F-1SPL (max. 6)

Cassette in BPEO-T-2S-12F version occupies one port in organizer, cassette in BPEO-T-2S-12F-1SPL version occupies two ports in organizer. In the case of the use of both types of cassettes please consider the capacity of the organizer and occupancy of cassettes.

K – Splitters qty	1 –	none
	2 –	one
	3 –	two
	4 –	three
L – Split of 1st splitter:	0 – none; 1 – 1:2; 2 – 1:4; 3 – 1:8	
M – Split of 2nd splitter:	0 – none; 1 – 1:2; 2 – 1:4; 3 – 1:8	
N – Split of 2nd splitter:	0 – none; 1 – 1:2; 2 – 1:4; 3 – 1:8	
O – Mounting handle with a rack:	1 –	none
	2 –	SZ-D-S12

Example

OBP-S3-4812-48A2G01-121-3333-2

Fibrain OBP-S3 pole mounting distributor equipped with 48 Standard One-Piece SC APC adapters, 48 Gold Grade pigtails, 2 m length, 12 splice cassettes BPEO-T-1S-12F type, 3 splitters with 1x8 split and one SZ-D-S12 mounting handle

To order a non- standard option, please contact with our Sales Department.

Pole Mounting Distributor OBP-S8

Description
→ Fibrain Pole Mounting Distributor OBP-S8 is dedicated for FTTH networks deployed in open aerial areas. The housing as a distribution point is designed to terminate up to 36 fibers. As a standard box is equipped with 1 splice tray (2 others can be ordered separately). The facility for fiber/tube management gives an opportunity for installation of splitters and passive optical converters. Pivot swivel box cover enables wide access to interior (it opens up to 140°) additionally cover block mechanism guarantee comfortable installations and maintenance work for installers. Housing can be optionally equipped with cylinder lock.

Applications
→ Distribution point for FTTH network
→ Municipal networks
→ Last mile

Technical specification

	OBP-S8
Max fiber number	36
Max splice number	36
Max tray number	3
Max describer number	8
Max adapters number in patch field holder	9
FO adapters type	SC/E2000
Max ø of entry cables:	2 ports Ø12mm
	8 ports Ø4-8mm
Dimensions (W)x(H)x(D) [mm]	225x255x86
Ambient temperature	-40°C ÷ +50°C
Closure material	PC + ASA
Splice tray material	ABS V0
Splice tray holder material	ABS V0
Ingress protection	IP55

Features & benefits
→ Great mechanical resistance due to robust closure material (PC + ASA)
→ Holder for pivot swivel splice trays
→ Optional patch field for up to 9 FO adapters (SC/E2000)
→ Possibility for fixation of AluBox closure PLC splitter (max 1:8) directly in splice trays or in splice tray holder
→ Cable plugs and/or central strength member clamp for installation cables
→ Up to 3 splice trays
→ Splice trays for up to 12 fibers
→ Optional dedicated cable reserve frame
→ Optional mounting kit for older Fibrain Cable reserve frames

Equipment and additional accessories of OBP-S8

Holder for SCM-B-12H cassette (max. 3 pcs) and adapter field

Cable mounting in/out for OBP-S8 indoor application

Handles for cables tube organization

Cable holder

Cable glands
1. 8-port for drop cables
2. Single port for line cable (max. 2 pcs)

Pole Mounting Distributor OBP-S8
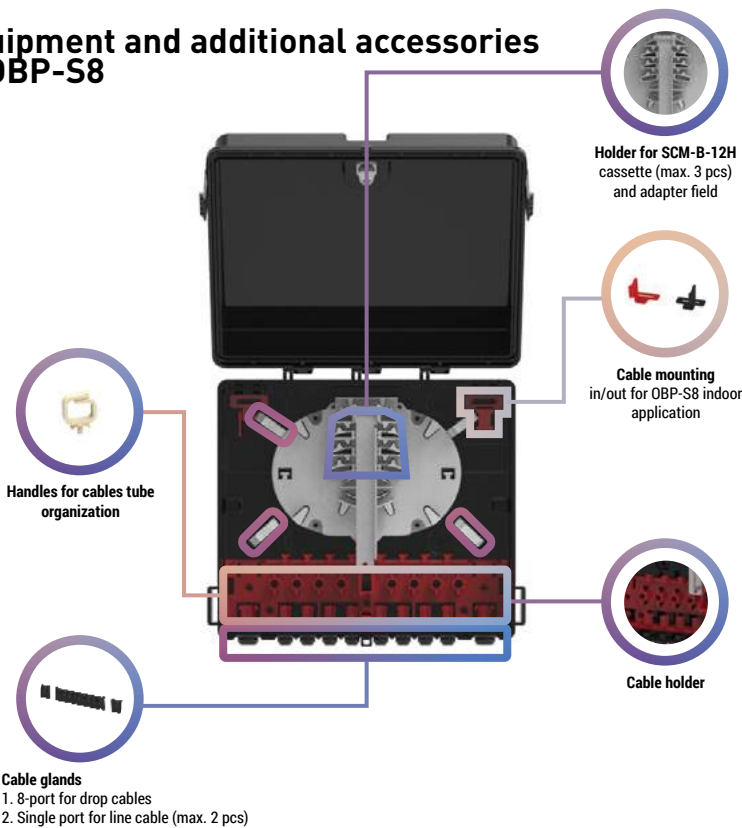
Ordering syntax for Pole Mounting Distributor OBP-S8

OBP-S8-A-BCD-EFGHI-J-K-L-M

A – Number of splice trays		1-3
B – Adapters qty:		0-9
C – Adapter class	1 –	Standard One-Piece
	2 –	Premium One-Piece with internal shutter
	3 –	Premium Super One-Piece with internal shutter
D – Adapter type (with shutter only)	0 –	none
	1 –	SC/PC,
	2 –	SCA/APC,
	3 –	E2000/PC (only standard version)
	4 –	E2000/APC (only standard version)

E – Splitters qty	**0** : none, **1** : one, **2** : two, **3** : three, **4** : four
F – Split of 1st splitter	**0** : none, **1** : 1:2, **2** : 1:4, **3** – 1:8
G – Split of 2nd splitter	**0** : none, **1** : 1:2, **2** : 1:4, **3** – 1:8
H – Split of 3rd splitter	**0** : none, **1** : 1:2, **2** : 1:4, **3** – 1:8
I – Split of 4th splitter	**0** : none, **1** : 1:2, **2** : 1:4, **3** – 1:8
J – Cable reserve frame	**0 –** none / **1 –** yes
K – Patch field holder	**0 –** none / **1 –** yes
L – Additional cable seals	**0 –** none / **1 –** yes
M – Cylinder lock	**0 –** none / **1 –** yes

Example

OBP-S8-3-912-22200-1-1-0-0

Fibrain distribution box OBP S8 equipped with 3 splice trays, 9xSC/APC FO adapters, up to 12 splices, 2xAluBox splitters (1x4 each), Cable reserve frame equipped, with patch field for 9 adapters.

To order a non- standard option, please contact with our Sales Department.
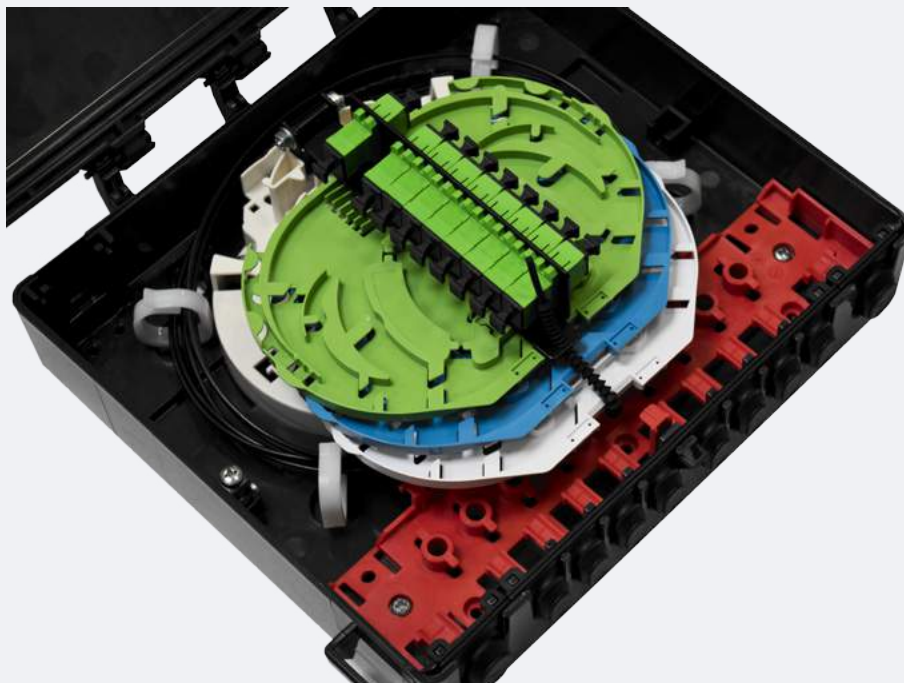
Distribution cabinets outdoor

The structure of fiber-optic networks provides the use of external distribution points in the form of external cabinets. Depending on the topology, cabinets can have different capacity and inside organization of fibers. They can be equipped with the standard solutions that can be found in Part 4.

Post
/cabinet

They can be made of composite or metal. Sometimes there can be solutions in which mounting active devices is necessary.
In this case, we use SCAB cabinets, whose design is based on a rack system that provides mounting standard accessories in the form of patch panels.

DISTRIBUTION CABINETS OUTDOOR

FDH-Cx-x Outdoor cabinets

Technical specification

	FDH-C0-X	FDH-C1-X
Max. number of fibers	48	48
Max. number of splices	48	48
Max. number of subscribers	24	24
Max. number of adapters in organizer	27	27
Max. diameter of the fiber optic cable [mm]	9	10
Cabinet dimensions (w)x(h)x(d) [mm]	264x420x245	264x420x245
Cabinet's dimensions (w)x(h)x(d) [mm]	264x1308x245	264x1308x245
Type of connection set type	24x3/2.1	2x(12x5/3.5)
Length of connection set [m]	2.75	2.75
Type of entry cables	Microcables up to MK-LX8 Microbundles up to MK-AX2	Microcables up to MK-LX8 Microbundles up to MK-DX2
Type of foundation's filling	Expanded clay agregate	Expanded clay aggregate
Amount of filling per cabinet	18dm³ *	18dm³ *
Working temperature	-50°C to +40°C	-50°C to +40°C
Flammability category	FH2 – 7mm	FH2 – 7mm
Level of protection	IP44/IP54	IP44/IP54
Housing colour	RAL 7035	RAL 7035
Housing material	Polyester + fiberglass	Polyester + fiberglass

* The cabinet is delivered with appropriate amount of the filling

Additional equipment

Adapters	according to CONNECTIVITY'16 catalogue
Cassettes:	FB7401.2PP + a clip connecting the FB7401.5 cassettes (4pcs. when connecting 2 cassettes)
Splitters:	FPLC-xx in BlackBox and AluBox housings
Reduction connectors:	MT-ZR-0703 (FDH-C0-x), MT-ZR-0705 (FDH-C1-x)
Connection set:	MT-CS2403-xx (FDH-C0-x), MT-CS1205-xx (FDH-C1-x)
Pigtails:	according to CONNECTIVITY'16 catalogue

Description

→ Fibrain FDH-Cx-x outdoor cabinets are specifically designed for optical fibers distribution, which are placed in a duct or microduct system, and then distributed to end-users. Therefore, the optical fibers are constructed from flame retardant materials (polyester + fiberglass) which are resistant to weather conditions (UV). Moreover, the ventilation system minimizes the moisture accumulation. Thanks to simple construction and small size of the cabinets, they are perfect solutions for end points placed on the ground. The cabinets provide the possibility to perform connections between cables/microcables and drop cables or bundle of microfibers due to an organizer, which can contain up to 27 adapters with SC SX openings. Also, extra cables/microcables for the use in the future, can be placed inside the cabinet. Despite small size of the cabinet, a lot of cables can be installed inside, and therefore a demountable construction such as a top/back part or a base of the cabinet provides easy access to the inside equipment.

❖ Applications

→ Outdoor redistribution point of the FTTH network
→ Local networks
→ Last mile networks
→ Optical fiber microduct system

Features & benefits

→ Constructed from material which guarantees high mechanical durability
→ Available in a version for 24 subscribers
→ Moveable two-section organizer
→ Place for 27 adapters and PLC splitters in BlackBox or AluBox housings
→ Place for 2 cassettes- 24 fibers and a hanger for a cable/microcable or a connection set bundle
→ Cabinet protected by locks
→ Possibility of performing the splices: cable lines- cable lines
→ Performed to place cables and microcables

Ordering syntax for equipped FDH-Cx outdoor cabinets

FDH-XX-AABC-DE-FGHI-JJ-K

XX – Version of FHD-Cx cabinet	FDH outdoor cabinet in C0 version	
	FDH outdoor cabinet in C1 version	
AA – Adapters qty	**0-27**	
B – Adapter class	1 –	Standard One-Piece (applies to E2000/E2000 APC adapters too)
	2 –	Premium One-Piece with internal shutter
	3 –	Premium Super One-Piece
	4 –	Premium Super One-Piece with internal shutter
	0 –	Standard One-Piece (applies to E2000/E2000 APC adapters too)
	2 –	Premium One-Piece with internal shutter
	3 –	Premium Super One-Piece
	3 –	Premium Super One-Piece
	4 –	Premium Super One-Piece with internal shutter

D – Splice cassette qty	**0-2**	
E – Cassette type	0 –	none
	1 –	SCM-A-12H
	2 –	SCM-A-24H
	3 –	FB7401.2PP
F - Splitters qty	**1-4**	
G – Splitter type	0 –	not ended
	1 –	end with connectors in accordance with adapters' standards
H – Splitter housing	1 –	AluBox housing
	2 –	BlackBox housing
I – Splitter division	1 –	1:2
	2 –	1:4
	3 –	1:8
	4 –	1:16
	5 –	1:32
JJ – Reduction connectors qty	**0 – 24**	
O – Connection set	0 –	none
	1 –	one
	2 –	two

Example

FDH-C0-2712-22-3123-24-1

Fibrain FDH C0 cabinet equipped with 27 SC APC Standard One-Piece adapters, two cassettes of 24 splices, 3 splitters 1x8 in a BlackBox housing with connectors, 24 reduction connectors 7/3 and 1 connection set 24x3/2.1

To order a non- standard option, please contact with our Sales Department.

FDH-Dx-x Outdoor cabinets

Description

→ Fibrain FDH-Dx-x outdoor cabinets are specifically designed for optical fibers distribution, which are placed in a duct or microduct system, and then distributed to end-users. Therefore, the optical fibers are constructed from flame retadant materials (polyester + fiberglass) which are resistant to weather conditions (UV). Moreover, the ventilation system minimizes the moisture accumulation. Thanks to simple construction and small size of the cabinets, they are perfect solutions for end points placed on the ground. The cabinets provide the possibility to perform connections between cables/microcables and drop cables or bundle of microfibers. Also, extra cables/microcables for the use in the future, can be placed inside the cabinet. Despite small size of the cabinet, a lot of cables can be installed inside, and therefore a demountable construction such as a top/back part or a base of the cabinet provides easy access to the inside equipment.

Technical specification

	FDH-D0-X	FDH-D1-X
Max. number of fibers	48	48
Max. number of splices	48	48
Max. number of subscribers	24	24
Max. diameter of the fiber optic cable [mm]	9	10
Cabinet dimensions (w)x(h)x(d) [mm]	264x420x245	264x420x245
Cabinet dimensions with basis (w)x(h)x(d) [mm]	264x1308x245	264x1308x245
Type of connection set type	24x3/2.1	2x(12x5/3.5)
Length of connection set [m]	2.75	2.75
Type of entry cables	Microcables up to MK-LX8 Microbundles up to MK-AX2	Microcables up to MK-LX8 Microbundles up to MK-DX2
Type of foundation's filling	Expanded clay agregate	Expanded clay aggregate
Amount of filling per cabinet	18dm³ *	18dm³ *
Working temperature	-50°C to +40°C	-50°C to +40°C
Flammability category	FH2 – 7 mm	FH2 – 7 mm
Level of protection	IP44/IP54/IK10	IP44/IP54/IK10
Housing colour	RAL 7035	RAL 7035
Housing material	Polyester + fiberglass	Polyester + fiberglass

* The cabinet is delivered with appropriate amount of the filling

Applications

→ Outdoor redistribution point of the FTTH network
→ Local networks
→ Last mile networks
→ Optical fiber microduct system

Features & benefits

→ Constructed from material which guarantees high mechanical durability
→ Available in a version for 24 subscribers
→ Moveable two-section organizer
→ Place for 2 cassettes- 24 fibers and a hanger for a cable/microcable or a connection set bundle
→ Cabinet protected by locks
→ Possibility of performing the splices: cable lines- splitter, cable lines- cable lines
→ Performed to place cables and microcables
→ Protection against moisture accumulation

Additional equipment

Adapters	according to CONNECTIVITY'16 catalogue
Cassettes:	FB7401.2PP + a clip connecting the FB7401.5 cassettes (4pcs. when connecting 2 cassettes)
Splitters:	FPLC-xx in BlackBox and AluBox housings
Reduction connectors:	MT-ZR-0703 (FDH-C0-x), MT-ZR-0705 (FDH-C1-x)
Connection set:	MT-CS2403-xx (FDH-C0-x), MT-CS1205-xx (FDH-C1-x)
Pigtails:	according to CONNECTIVITY'16 catalogue

Ordering syntax for equipped FDH-Dx outdoor cabinets

FDH-XX-A-BB-C

XX – Version of FHD-Dx cabinet	FDH outdoor cabinet in D0 version
	FDH outdoor cabinet in D1 version

A – Adapters qty	1-2

BB – Number of reduction connectors	0-24

C – ConnectionSet	0 –	none
	1 –	one
	2 –	two

Example

FDH-D0-2-24-1 Fibrain FDH D0 cabinet equipped with two cassettes of 24 splices, 24 reduction connectors 7/5 and 2 connection sets 12x5/3.5

To order a non- standard option, please contact with our Sales Department.

FIBRAIN

SCAB outdoor cabinet

Description

→ Fibrain StreetCAB outdoor cabinets in the standard 19"-21", available in height between 15-42U are made of aluminium sheet with 2 mm thickness based on the so-called. double wall, which provides a natural, unforced air flow and cooling of devices working inside the cabinet. SCAB outdoor cabinets are based on the self-supporting structure or aluminium profile (depending on the cabinet's type) which allows to get the maximum tightness of the whole casing as well as cabinet's modularity. SCAB cabinets are equipped with mounting profiles in 19" or 21" and the mounting plates located on the back wall and the cable glands in the floor. Cabinet doors are equipped with triple bolt lock (15 and 22U) and four bolt lock (42U). In the case of double-wing cabinet is used perforated baffle in the middle of the cab-inet, which separate the two assembly parts. In addition, load bearing capacity of cabinet has been increased up to 800kg, and overall weight of cabinet has been reduced.

Ordering information

SCAB-19-15-11-1	Fibrain SCAB outdoor cabinet 19" 15U 850x450x900mm (wxdxh), single chamber with mounting plate single-wing door, self-supporting structure
SCAB-19-22-11-1	Fibrain SCAB outdoor cabinet 19" 22U 850x450x1200mm (wxdxh), single chamber with mounting plate, single-wing door, self-supporting structure
SCAB-19-22-11-2	Fibrain SCAB outdoor cabinet 19" 22U 850x850x1300mm (wxdxh), single chamber, single-wing door, aluminium profile
SCAB-19-22-22-2	Fibrain SCAB outdoor cabinet 19" 22U 1650x450x1200mm (wxdxh), double chamber with mounting plates, double-wing door, self-supporting structure
SCAB-19-22-23-2	Fibrain SCAB outdoor cabinet 19" 22U 1300x850x1300mm (wxdxh), double chamber, front and rear door, double-wing door, aluminium profile
SCAB-19-28-11-2	Fibrain SCAB outdoor cabinet 19" 42U 850x850x2100mm (wxdxh), single chamber, single-wing door, aluminium profile

To order a non- standard option, please contact with our Sales Department.

Applications

→ MAN networks
→ Telecommunication
→ FTTH networks
→ Optical fiber microduct system
→ Monitoring

Additional accessories

Plinths for cabinets

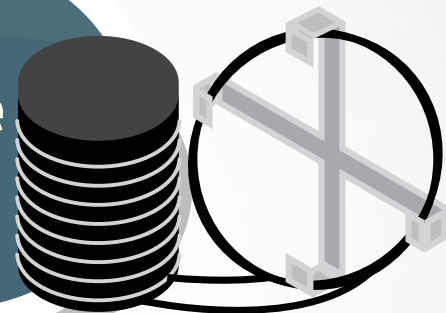|	
SCAB-CKP-1	Fibrain plinth underground for SCAB with dimensions: 850x450x600 mm ((w)x(d)x(h))
SCAB-CKP-2	Fibrain plinth underground for SCAB with dimensions: 850x850x600 mm ((w)x(d)x(h))
SCAB-CKP-3	Fibrain plinth underground for SCAB with dimensions: 1300x850x600 mm ((w)x(d)x(h))
SCAB-CKP-4	Fibrain plinth underground for SCAB with dimensions: 1650x450x600 mm ((w)x(d)x(h))

Features & benefits

→ 19" or 21" standard
→ Available in 15, 22 and 42U
→ Available in single or double chamber version
→ Modularity
→ Safety and functionality
→ Wide range of additional accessories
→ Minimum degree of protection IP54
→ Load bearing capacity up to 800 kg

Outdoor closure

Fibers optic closures are an alternative to distribution points in the form of outdoor cabinets that can be mounted on both poles of the AirTrack system but also in telecommunications wells or directly buried in the ground.

Closure
+ frame

FB8000.41 fiber optic closure

Description

→ The fiber optic closure FB8000.41 is the element which is used to connect and protect the fiber optic connections in different applications. The fiber optic closures are specifically designed for connecting optic fiber routes as well as for branchings. The fiber optic closure can be placed in aerial, wall-mounting or underground areas. It is equipped with 4 round ports for single cables (cut) and one oval entrance for uncut cables. The fiber optic closure is suitable for the applications up to 144 fibers, which can be used in various applications in the long-distance optic fiber transmission as well as in the local networks such as Fiber To The Home/ Fiber To The Curb (FTTH/FTTC). Therefore, in order to protect the fiber against the moisture, specifically designed FB8000.ABS absorbers can be mounted on a fiber optic closure's organiser.

Technical specification

	FB8000.41
Max. number of fibers	144
Max. number of welds	144
Max. number of cassettes	6
Max. capacity of cassettes	24
Range of cable diameter for 4 round ports [mm]	6-17
Range of cable diameter for a round port [mm]	6- 25
Max. number of cable entrances	5
Fiber optic closure dimensions (Ø)x(w) [mm]	230x450
Leakproofness of ports	thermic
Type of entrance cables	Canal cables Aerial cables
Working temperature	-40°C – +65°C
IP protection	IP68
Housing type	MPP

Applications

→ Cardinal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

Features & benefits

→ Max. capacity 144 welds
→ Leakproofness of thermic ports
→ Possibility of placing single line cables
→ Possibility of placing uncut cables
→ Aerial or inside a well mounting
→ Built-in organiser for fiber optic tubes

Ordering information

FB8000.41	Fibrain fiber optic closure, 4 round ports and one oval, equipped with one cassette for welds, a mounting handle into a well or a pole.

Equipped version of FB8000.41 closure according to DSH - please contact with our Sales Department

Internal look of fiber optic closure

Fiber optic closure with mounted handle

FB8000.61 fiber optic closure

Technical specification

	FB8000.61
Max. number of fibers	240
Max. number of welds	240
Max. number of cassettes	10
Max. capacity of cassettes	24
Range of cable diameter for 4 round ports [mm]	6-17
Range of cable diameter for a round port [mm]	6- 25
Max. number of cable entrances	7
Fiber optic closure dimensions (Ø)x(w) [mm]	260x465
Leakproofness of ports	thermic
Type of entrance cables	Canal cables Aerial cables
Working temperature	-40°C – +65°C
IP protection	IP68
Housing type	MPP

☰ Description

→ The fiber optic closure FB8000.61 is the element which is used to connect and protect the fiber optic connections in different applications. The fiber optic closures are specifically designed for connecting optic fiber routes as well as for branchings. The fiber optic closure can be placed in aerial, wall-mounting or underground areas. It is equipped with 6 round ports for single cables (cut) and one oval entrance for uncut cables. The fiber optic closure is suitable for the applications up to 240 fibers, which can be used in various applications in the long-distance optic fiber transmission as well as in the local networks such as Fiber To The Home/ Fiber To The Curb (FTTH/FTTC). Therefore, in order to protect the fiber against the moisture, specifically designed FB8000.ABS absorbers can be mounted on a fiber optic closure's organiser.

❖ Applications

→ Cardinal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

⊞ Features & benefits

→ Max. capacity 240 welds
→ Leakproofness of thermic ports
→ Possibility of placing single line cables
→ Possibility of placing uncut cables
→ Aerial or inside a well mounting
→ Built-in organiser for fiber optic tubes

Ordering information

FB8000.61	Fibrain fiber optic closure, 6 round ports and one oval, equipped with one cassette for welds, a mounting handle into a well or a pole.

Equipped version of FB8000.61 closure according to DSH - please contact with our Sales Department

Internal look of fiber optic closure

Fiber optic closure with mounted handle

FIBRAIN

A panel with adapters for the FB800 group of fiber optic closures

Technical specification

	FB8000.61	FB8000.61
Max. number of fibers in a fiber optic closure with a panel	72	120
Max. number of splices in a fiber optic closure with a panel	72	120
Max. number of cassettes in a fiber optic closure with a panel	3	5
Panel's dimensions (width) x (length) x (depth) [mm]	12 SC DX	
Operating temperature	110x220x50	
Housing material	-40°C - +65°C	
Colour of housing material	Powder painted steel	
Housing type	RAL 7035	

Additional accessories

Adapters	according to the CONNECTIVITY'16 catalogue
Splitters:	FPLC-xx in AluBox mountings – according to the PON catalog

Ordering information

FB8000.AP	Fibrain panel with 12 SC DX adapters for the FB800 group of fiber optic closures

A method of mounting a panel inside the FB8000.41 closure

A method of mounting a panel inside the FB8000.61 closure

A panel equipped with pigtails installed in the FB8000.61 closure

The grip of a panel in the FB8000.61 closure

FB8000.AP

🗎 Description

→ The Fibrain panel is specifically designed for the FB800 group of fiber optic closures. A panel with adapters with max. capacity up to 12 SC DX adapters facilitates the switching between the optical fibers terminated with pigtails which are installed in a fiber optic closures. Therefore, there is a possibility of mounting fiber optic splitters inside Alubox mountings, thus such fiber optic closure can be used in the FTTx networks.

❖ Applications

→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

Features & benefits

→ Max. capacity – 12 SC DX adapters
→ A panel can be quickly and easily mounted to the fiber optic closure
→ A possibility of mounting splitters in the Alubox mounting
→ Opening the panel provides quick access to the cassettes
→ Protected from damaging fibers during opening a panel
→ Compatible with FB8000.41 and FB8000.61 fiber optic closures
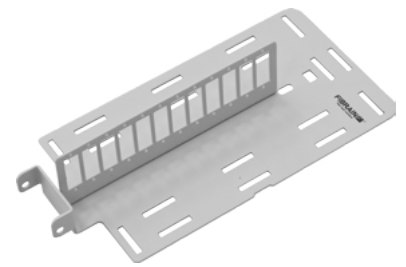
FB8000.AP

FB8000.ABS moisture absorber
for FB8000.41 & FB8000.61 closure series

Technical specification

	FB8000.ABS
Type	solid body
Color	white
Fragrance	no smell
Water solubility	practically insoluble
Health threat	no threat to health
Environmental threat	inert substance for environment
Dimensions (HxDxW) [mm]	110x75x12
Weight [g]	50
Cover of absorber	non-woven fabric

Ordering information

FB8000.ABS	Fibrain moisture absorber for fiber optic closure FB8000.41 and FB8000.61 series

Description
→ Fibrain FB8000.ABS moisture absorber is an additional accessory for FB8000.41 and FB8000.61 fiber optic closure. Installed inside in the fiber optic closure gives the maximum protection against moisture condensation. Due to the very high hygroscopicity after removing absorber's from the package please consider that absorber must be immediately installed and the fiber optic closure must be sealed.

Keep in mind
→ Keep in mind: During service work after the opening of the fiber optic closure absorber must be immediately put in a resealable plastic bag. During the maintenance inspection, which need to perform at least once every two years absorber must always be replaced with a new one.

Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

Features & benefits
→ Protection against moisture condensation

FB8000.U seal kit for FB8000.41 and FB8000.61 fiber optic closures

FB8000.U

Description
→ The FB8000.U seal kit is an additional protection to seal entry ports in FB8000.41 and FB8000.61 fiber optic closures, which is suitable for both round and oval ports.
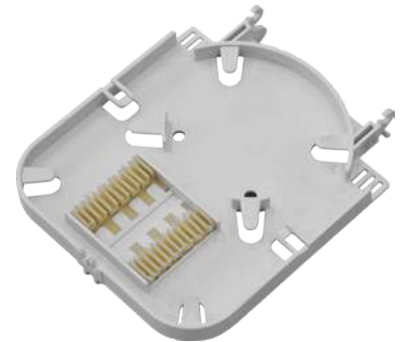
Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

Features & benefits
→ Possibility to seal up to 6 round ports
→ Possibility to seal an oval port

Content

	FB8000.U
Seal parts for round ports	6pcs
A seal part for oval port	1pcs
A clip to seal oval port	1pcs

Ordering information

FB8000.U	Fibrain seal kit for FB8000.41and FB8000.61 fiber optic closures

FDHB-A0 Drop Hub closure

📄 Description
→ FDHB-A0 closure is an innovative and specifically designed solution for FTTx networks. The closure has 3 single ports for single cables, a one port is dedicated for uncut cables and a one Drop port for a single cable Ø 6mm and four cable of drop Ø 2.0mm. Due to additional handles, a closure can be mounted in a well and on a post with the use of available handles.

❖ Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks

Features & benefits
→ Max. capacity 60 welds
→ Tightening ports of a mechanic type
→ Possiblity of placing line cables and drops
→ Possibility of palcing uncut cables
→ Possibility of mounting the closure on the air track and inside underground in the wells
→ Pneumatic valve for testing the tightness
→ A grounding screw

Technical specification

	FDHB-A0
Max. numer of fibers	60
Max. numer of welds	60
Max. numer of cassettes	5
Range of cables diameters[mm]	8 - 15
Max. numer of cable entries	5
Closure dimenions (s)x(w)x(g) [mm]	220x300x100
Ports tightness	mechanic
Type of entry cables	Canal cables
Work temperature	Air Track cables
IP protection	DropCables

Additional equipment

Cassettes:	FDHB-A0-TRAY

Ordering information

FDHB-A0	Fibrain DROP HUB closure, 5 round ports equipped with two cassettes, a handle to mount on a well's wall, a tightness adjustment valve, a grounding screw

FDHB-A0-TRAY

A look inside a closure

A closure with a mounting handle

FIBRAIN

BPEO-S1/S2/S3 fiber optic closures

Technical specification

	BPEO-S1	BPEO-S2	BPEO-S3
Max. number of fibers	144	336	576
Max. number of fusion splices	144	336	576
Max. number of mechanical splices (different type of splice trays is needed)	72	168	288
Max. number of 1x8 splitters (different type of splice trays is needed)	6	14	24
Max. number of cassettes (with 5mm thick)	12	28	48
Dimensions without fixing supports (length x width x depth) [mm]	382x204x92	520x341x149	661x341x149
Depth after mounting with fixing wall support [mm]	97	154	154
Depth after mounting with fixing pole support [mm]	122	178	178
IP protection	IP68	IP68	IP68
Type of entry cables	Duct cables Aerial cables Direct-buried cables Microducts		
Ports sealing	mechanical		

☷ Description

→ The BPEO-Sx are the latest generation of waterproof closures for fiber optic networks. The BPEO fiber optic closures are the elements which are used to connect and protect fiber optic connections in different applications. These fiber optic closures are specifically designed for cable branchings, especially in FTTx networks. They can be installed in air-track network or wall-mounted. The fiber optic closure is suitable for the solutions up to 144/336/576 fibers, which can be used in various fiber optic applications in the local distribution networks such as Fiber To The Home. The BPEO closures are delivered with a fiber organizer with different capacity of splice tray slots (depending on the size). Splice tray, cable entry sealing and closure supports must be ordered separately.

❖ Applications

→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks
→ FTTx networks
→ Direct burried application

⊞ Features & benefits

→ Simplified opening and closing
→ Excellent fibre accessibility
→ Body and cover with valve for sealing test
→ Organiser with three management zone
→ Possible to mix tray types on the same organiser
→ Structured storage and protection of fibre
→ Sealing of mechanical ports
→ Possibility of placing cables/single microducts
→ Possibility of placing uncut cables
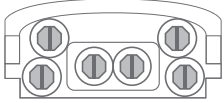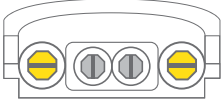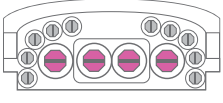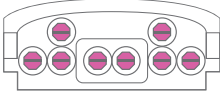→ Aerial or inside a cable wells mounting

Additional accessories

Adapters	according to the CONNECTIVITY'16 catalogue
Splitters:	FPLC-xx in AluBox mountings – according to the PON catalog

Example of port configuration

Port configuration

BPEO-S1-EDP	BPEO-S1-CDP	BPEO-S2-EDP BPEO-S3-EDP	BPEO-S2-CDP BPEO-S3-CDP
Two possible configuration: **1.** 1x double port ECAM D5-20 and 4x single port ECAM S4-12 **2.** 6x single port ECAM-S4-12	**Two possible configuration:** **1.** 1x double port ECAM D5-20 and 2x single port ECAM S5-18 **2.** 2x single ECAM S5-18 and 2x single port ECAM S4-12	**Two possible configuration:** **1.** 1x double port ECAM D5-27, 2x single port ECAM S5-18 and 10x single port ECAM S4-12 **2.** 4x single port ECAM S5-18 and 10x single port ECAM S4-12	**Two possible configuration:** **1.** 1x double port ECAM D5-27 and 6x single port ECAM S5-18 **2.** 8x single port ECAM-S5-18

EDP – end distribution point

CDP – cable distribution point

	Double cable seal ECAM D5-20 or 2 single ECAM S4-12		**Double cable seal ECAM D5-27 or 2 single ECAM S5-18**
	Single cable seal ECAM S4-12		**Single cable seal ECAM S5-18**
	Single cable seal ECAM S5-18		**Single cable seal ECAM S4-12**

Cable seals

Serial number	Description
ECAM-S5-18-EV	ECAM Cable seal kit 5-18 mm S5 EVOLUTION
ECAM-S7-EV	ECAM Cable seal kit 3-7 mm S7 EVOLUTION
ECAM-D1.5X12	ECAM Cable seal kit 1.5 mmX12 EVOLUTION
ECAM-D12-EV	ECAM Cable seal kit 4-12 mm D12 EVOLUTION
ECAM-D18-EV	ECAM Cable seal kit 5-18 mm D18 EVOLUTION
ECAM-D2X10	ECAM Cable seal kit 2 mm 233X10 EVOLUTION
ECAM-D5.5X7	ECAM Cable seal kit 5.5 mm X 7 EVOLUTION
ECAM-D5-20-EV	ECAM Cable seal, double kit 5-20 mm, possibility to enter of the line cable without cutting in the BPEO closure series
ECAM-D5-27-EV	ECAM Cable seal, double kit 5-27 mm, possibility to enter of the line cable without cutting in the BPEO closure series
ECAM-D6-18-EV	ECAM Cable seal, double 6-18 mm, possibility to enter of the line cable without cutting in the BPEO closure series
ECAM-KIT-D6-9-EV	ECAM cable seal, double kit 6-9 mm, possibility to enter of the line cable without cutting in the BPEO closure series

Additional accessories

| Serial number	Description
BPEO-BR08SCX	FIBRAIN mounting panel for 8 SC SX adapters for BPEO closure
BPEO-T-1S-12F	Splice cassette for BPEO closure, 12 fiber, splice protector 45-60 mm, takes one slot in BPEO organiser
BPEO-T-2S-12F-1SPL	Splice cassette for BPEO closure, 12 fiber, splice protector 45-60 mm + 4x4 PLC splitter, takes two slots in BPEO organiser
BPEO-S2-PH-V2	BPEO S2 POLE HOLDER V2
BPEO-S2-AP-12-SC-SX	Fibrain mounting plates for 12 SC SX adapters for BPEO closures
BPEO-S1-UN	Fixing wall support for BPEO S1
BPEO-S2-UN	Fixing wall support for BPEO S2 and S3
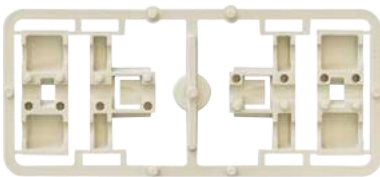
ECAM-KIT-D6-9-EV   **ECAM-D12-EV**   **ECAM-D1.5X12**

Fiber optic cable frame and spare length cable boxes

Fiber optic cable frame and spare length cable boxes are fundamental elements of fiber optic networks. They are often used in telecommunications wells and in server rooms where spare lengths of fiber optic cable are often designed.
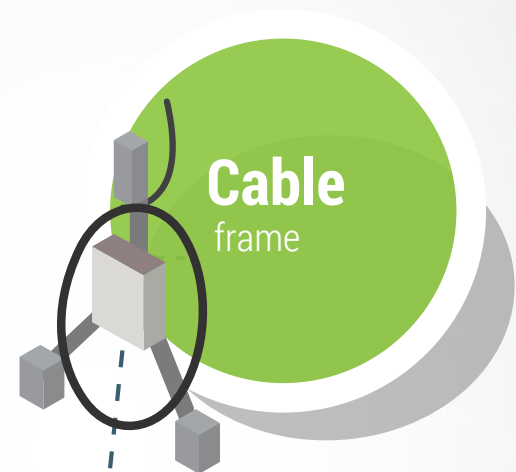
They guarantee esthetic placement of a cable and in case of cable spare length box prevent unauthorised access.

Cable
frame

SZ-A-xx cable reserve frame

Technical specification

	SZ-A-40	SZ-A-60
Height [mm]	400	600
Depth [mm]	95	95
Width [mm]	400	600
Capacity [mm]	Up to 50m of 10 mm cable	Up to 80m of 10 mm cable

Ordering information

SZ-A-40	Fibrain cable reserve frame 400 mm
SZ-A-60	Fibrain cable reserve frame 600 mm

Description

→ Fibrain reserve frame provides more appropriate and effective use of space in distribution points. Longer sections of cable reserve are used in the installation process. Optimized shape of the cable reserve frame provides the opportunity to adjust the length of a cable during coiling, and therefore guarantees esthetic placement of a cable.

Applications

→ Nodal points of optic fiber networks;
→ Distribution points of fiber optic networks
→ Server rooms and factories manufacturing cables

Features & benefits

→ Capacity up to 80 m of the fiber optic cable with 10 mm diameter
→ Easy access to cable reserve
→ Made of galvanized sheet metal
→ Mounting on nail expansion anchors

SZ-C Fiber optic and drop cable reserve frame

Description

→ Fibrain fiber optic and Drop cable reserve frame provides more appropriate and effective use of space in distribution points where IFDT cabinets are mounted. Longer sections of cable reserve are used in the installation process. An optimized shape of the cable reserve frame provides the opportunity to adjust the length of a cable during coiling, and therefore guarantees esthetic placement of a cable. The cable reserve frame is to be mounted on a well.
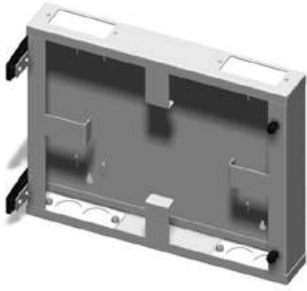
Applications

→ Nodal points of fiber optic networks;
→ Distribution points of fiber optic networks;

Features & benefits

→ Capacity up to 60 m cable with 6mm diameter
→ An easy access to cable reserve
→ Made of galvanized steel sheet
→ Mounted with the use of nail expansion anchors
→ A cable reserve frame is composed of two parts providing the possibility to mount BPEO-S1 distribution fiber splice closure

Technical specification

	SZ-C
Height [mm]	550
Depth [mm]	108
Width [mm]	607
Capacity [mm]	3

Ordering information

SZ-C	Fibrain cable reserve frame C version

FIBRAIN

CABLE RESERVE FRAMES

SZB-A-IFDT-B0/C0 cable reserve frame for IFDT-B0/C0 cabinet

Technical specification

	SZB-A-IFDT-B0	SZB-A-IFDT-C0
Height [mm]	315	315
Depth [mm]	65	65
Width [mm]	390	270
Capacity [mm]	Up to 10 m of 10 mm cable	Up to 5 m of 10 mm cable

Ordering information

SZB-A-IFDT-B0	Fibrain cable reserve frame with casing for IFDT-B0 cabinet
SZB-A-IFDT-C0	Fibrain cable reserve frame for IFDT-C0 cabinet

Description
→ Fibrain cable reserve frame provides more appropriate and effective use of space in distribution points where IFDT cabinets are mounted. Longer sections of cable reserve are used in the installation process. An optimized shape of the cable reserve frame provides the opportunity to adjust the length of a cable during coiling, and therefore guarantees esthetic placement of a cable. The cable reserve frame is mounted at the back side of a IFDT cabinet with the use of two hinges. Due to two screw caps in the IFDT-B0 cabinet, the cable reserve frame is not accessible.

Applications
→ Distribution points of FTTH networks

Features & benefits
→ Capacity up to 5 (C0) or 10 (B0) m of fiber optic cable with 10 mm diameter
→ Easy access to cable reserve
→ Casing made of galvanized steel sheet RAL7035
→ Mounted with the use of nail expansion anchors
→ Equipped with hinges to be mounted on IFDT cabinet

SZ-D-S12 Fiber optic and drop cable reserve frame

Description

→ Fibrain fiber optic and Drop cable reserve frame provides more appropriate and effective use of space in distribution points where IFDT cabinets are mounted. Longer sections of cable reserve are used in the installation process. An optimized shape of the cable reserve frame provides the opportunity to adjust the length of a cable during coiling, and therefore guarantees esthetic placement of a cable. The cable reserve frame is to be mounted on a well.

Applications

→ Distribution points of fiber optic networks
→ Nodal points of fiber optic networks
→ FTTx systems

Technical specification

	SZ-D-S12
Height [mm]	550
Depth [mm]	108
Width [mm]	607
Capacity [mm]	3

Features & benefits

→ Capacity up to 60 m cable with 6 mm diameter
→ An easy access to cable reserve
→ Made of galvanized steel sheet
→ Mounted with the use of nail expansion anchors
→ A cable reserve frame is composed of two parts providing the possibility to mount BPEO-S2 distribution fiber splice closure

Ordering information

SZ-D-S12	Fibrain cable reserve frame with pole bracket for OBP-S2

FIBRAIN

Cable reserve frame with pole bracket SZ-D-S8-M-xx

Description
→ Fibrain Cable Reserve Frame with pole bracket enables montage of OBP-S8 Pole Mounting Distributor. It enables, for the installer, to perform quick and efficient cable reserve deposit on the pole. During the installation they use much longer sections of telecommunication cables which has to be organized nearby distributor points. Optimized shape of frame enables adjustment of cable length while winding the cable.
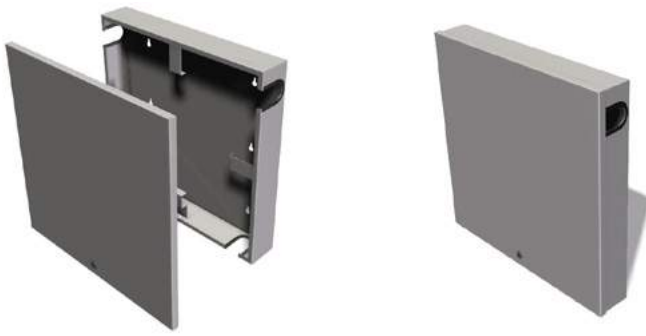
Applications
→ Distribution nodes of FO networks
→ FTTx networks

Features & benefits
→ Easy access to cable reservation reservoir
→ Made of galvanized steel sheet or galvanized steel powder coated

Technical specification

	SZ-D-S8-M
Height [mm]	471
Depth [mm]	116
Width [mm]	516
Weight [kg]	2.8

Ordering information

SZ-D-S8-M-ZN	Fibrain cable Reserve Frame with pole bracket SZ-D-S8-M, galvanized steel
SZ-D-S8-M-ZN-P	Fibrain cable Reserve Frame with pole bracket SZ-D-S8-M, galvanized steel powder coated, mounting with wing screw

SZB-A-xx cable reserve case

Technical specification

	SZB-A-40	SZB-A-60
Height [mm]	400	600
Depth [mm]	120	100
Width [mm]	400	600
Capacity [mm]	Up to 50 m of 10 mm cable	Up to 80 m of 10 mm cable

Ordering information

SZB-A-40	Fibrain lockable cable reserve case 400 mm
SZB-A-60	Fibrain lockable cable reserve case 600 mm

Description
→ Fibrain fiber optic and Drop cable reserve frame provides more appropriate and effective use of space in distribution points where IFDT cabinets are mounted. Longer sections of cable reserve are used in the installation process. An optimized shape of the cable reserve frame provides the opportunity to adjust the length of a cable during coiling, and therefore guarantees esthetic placement of a cable. The cable reserve frame is to be mounted on a well.

Applications
→ Nodal points of fiber optic networks
→ Distribution points of fiber optic networks

Features & benefits
→ Capacity up to 80 m of fiber optic cable of 10 mm diameter
→ Easy access to cable reserve
→ Casing made of steel sheet RAL 7035
→ Case protects the edges against damaging the sheath of a cable
→ Mounting on nail expansion anchors
→ Lockable casing protecting cable reserve

FIBRAIN

FIBRAIN®