

#smartconnection

Telecom Solution



# Central Office Solutions

Telecom Systems Catalogue

[www.aginode.net](http://www.aginode.net)

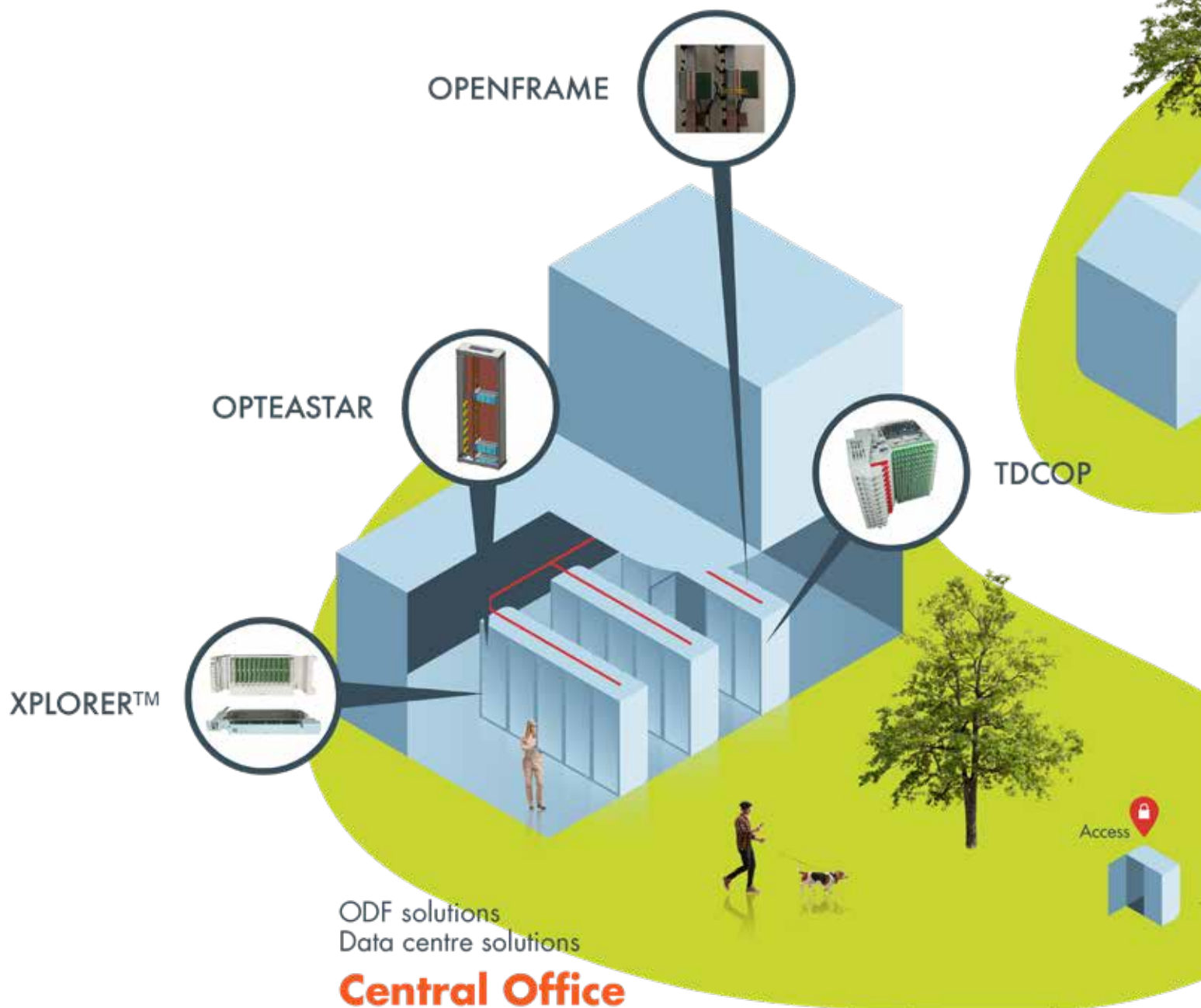


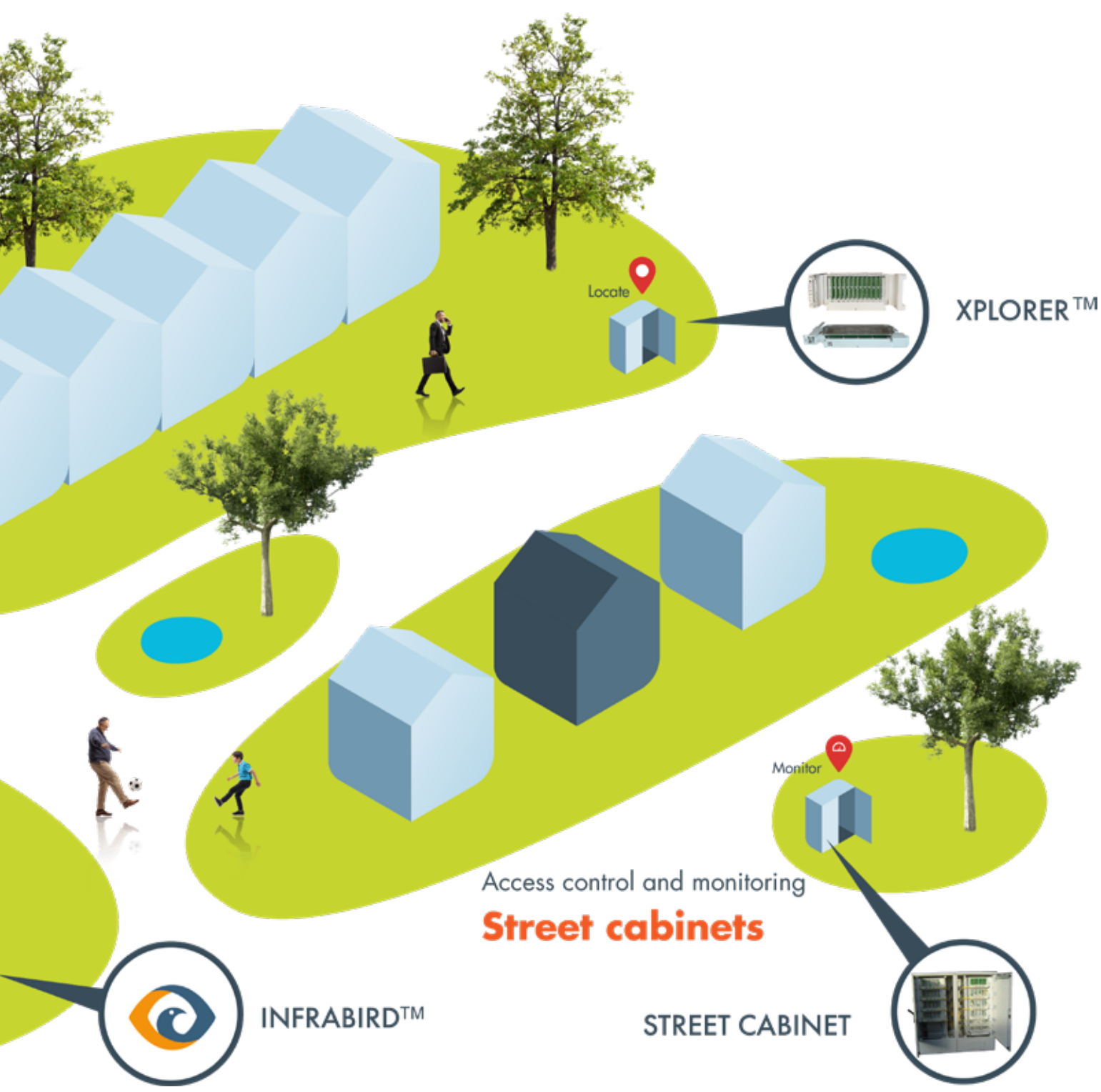


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# Central office main elements





Locate

XPLORER™

Monitor

Access control and monitoring  
**Street cabinets**

INFRABIRD™

STREET CABINET

# Optical distribution frame modules range



Intuitive splice cassettes for G652.D,  
G657.A1 and G657.A2



Comb to fix tubes or cables



Fixing bracket



Patchcords guided to the side,  
protected by front door with label  
for port identification



Adaptor holder



Titting splice cassettes for G652.D, G657.A1 and G657.A2



Pigtails well arranged to splice cassettes with intuitively designed bridges



Foam and lock to fix pigtails



Coiling area for tubes or cables



19" locking plate for swivelling part

# XPLORER™

## PUSHING THE LIMITS.

### PRE-INSTALLED, MODULAR SOLUTION & PRODUCED LOCALLY

Same platform for every function inside a FTTH network

- Patching, splicing, splitting and storage
- Central Office, Point of Presence or street cabinets
- Same look throughout network
- Reduced learning curve for installers



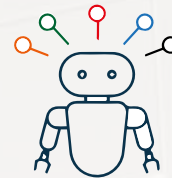
Ready to use panels with pre-installed adaptors/pigtails and splitters

- Fast installation on site
- Error free ordering process, time and time again
- Simplified logistics with limited number of products



Customization for every project

- Modular platform with adjustments according to project needs
- Always right product and subcomponents in the field
- Simplified logistics and ordering process
- Reduced stock holding



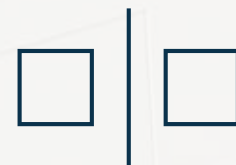
Produced locally

- Fast response time
- Reduced transport cost
- Lower environmental impact due to reduced transport
- Local expertise



Perfect symmetry

- One product for left or right axis rotation
- Always right product in the field
- Installer decides in the field for left or right axis





# LIGHT, ROBUST AND ENVIRONMENTAL FRIENDLY SOLUTION

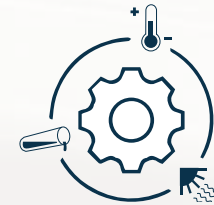
Lightweight panels based on reinforced fibre composite

- All 1U panels < 1,5kg, 3U and 4U panels around 3kg
- All panels can be installed by one technician



Robust platform with superior environmental characteristics

- More robust compared to metal panels
- Corrosion resistant
- Protection against most important aggressive chemicals
- Resistance against fungi and UV
- Wide temperature range (-40°C to 75°C) for indoor and outdoor use



Superior optical performance

- High quality Grade B connectors
- Improved bending with special designed boot



Environmental friendly packaging

- Cardboard packaging: Easy waste treatment and less waste volume
- No large white polystyrene protection blocks for protection



Eco Passport for XPLOER™

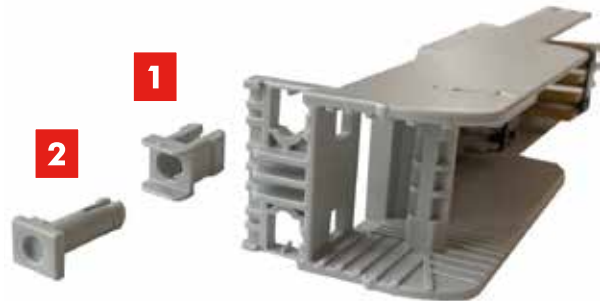
- Panels based on reinforced composite are more environmental friendly compared to metal panels
- Supported by White paper "Eco-design at Aginode"



## DESIGNED FOR EASY INTSALLATION

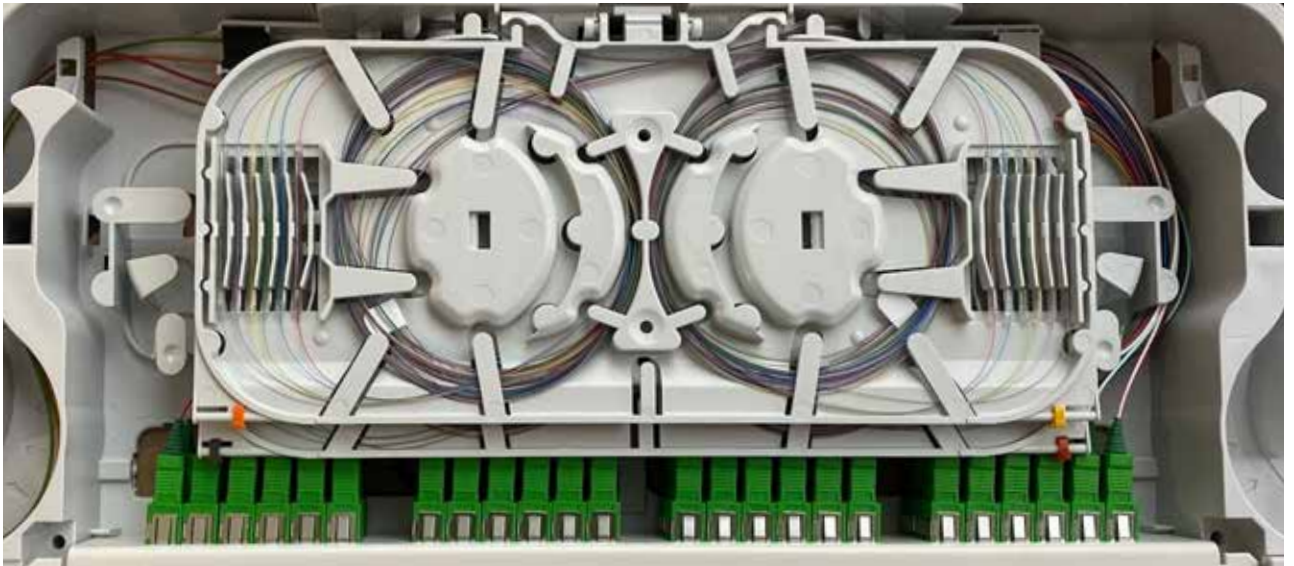
Toolless fixing of XPLOER™ modules with sockets and plugs:

- First sockets are installed from front of cabinet, followed by installation of plugs from front
- Fixed chassis fixed on front rail of cabinet and supportin rail in rear of cabinet
- Lock fixed on other front rail of cabinet
- Compatible with 9.5mm slots



Large splice cassettes:

- Separate area for splicing and storage
- Easy fibre management and installation
- Overhanging fibre retaining clips allow for wide range of fibre ring diameters
- Complete overview in one cassette
- Capacity: 24 or 48 splices
- Direct access to all splice cassettes with tilting function inside swivelling modules



# EASY OPERATION AND MAINTENANCE

Management of patch cords with spool kit:

- Fixed on the side of the front rail of cabinet
- Guides and keeps the patch cord to the pivoting side within the same rack unit as the patch panel
- Keeps the patch cords well-dressed inside the cabinet



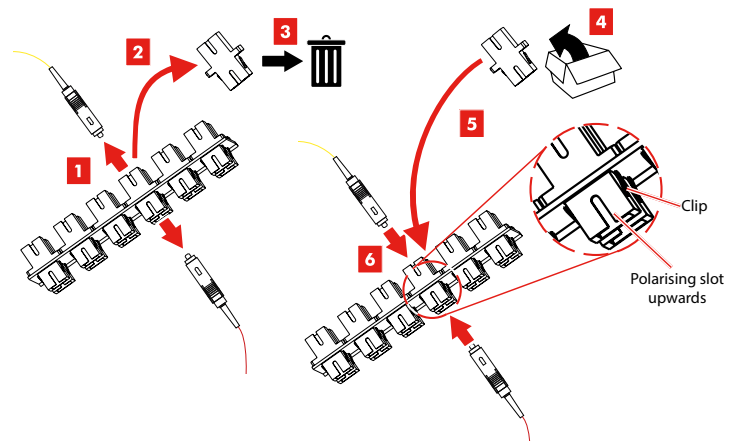
Translucent dust caps for SC adaptors:

- Compatible with Visual Fault Locator (VFL)
- Identification of optical channels and subscribers
- Reduction of laser power by 3.5 dB



Easy maintenance by quick replacement of adaptors:

- Adaptors can be removed from rear by screw driver
- Fast click in of replacement adaptor from front



QR-code link to installation guides:

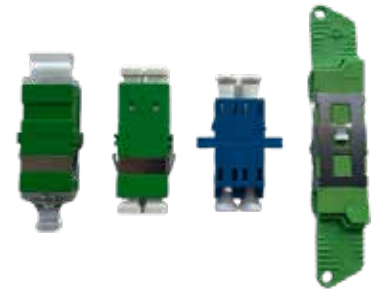
- QR-code on front door of each patch panel
- Linked to installation guides on website



# CUSTOMISED TO YOUR NEEDS

Different densities and connectors:

- SC/APC, LC/APC, SC/UPC, LC/UPC, E-2000/APC
- Density varying between 12 and 48 for SC and LC per 1U



Splicing:

- Heat shrink splice protectors Smoooves or Aluminum "ANT" splice protectors
- Alternative offering: small splice cassettes compatible with G.657.A2



Sequence of fibre colours:

- Fibre sequence modified according to regional or customer needs



Dust caps:

- Standard offering: SC adaptors with translucent dust caps with a reduction of 3.5 dB for easy identification
- Alternative offer: translucent dust caps with a power reduction of 10 dB for improved eye protection against laser light.



#### Cable fixing:

- Standard offering: fixing of 5mm tubes or Micro-Bundles in comb in fixed chassis
- Alternative: fixing of cables with tie wraps on optional metal plate in fixed chassis



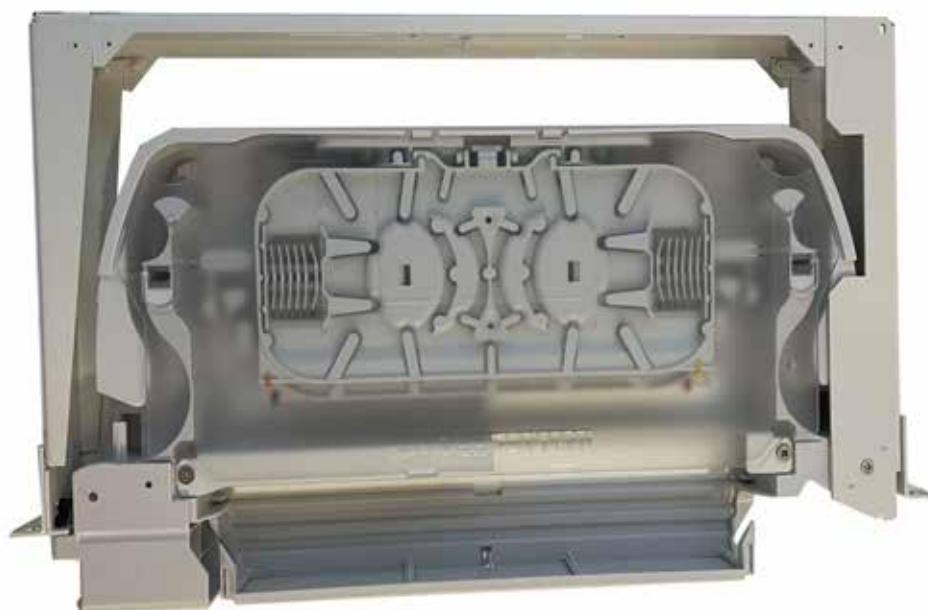
#### Fixing in cabinets:

- Standard offering for 19 inch
  - Sockets and plugs for convenient, fast installation from the front into 9,5mm square slots
  - Metal cage nuts for 8,3mm and 9,5mm square slots
- Optional: fixing kit to adjust for wider ETSI cabinets



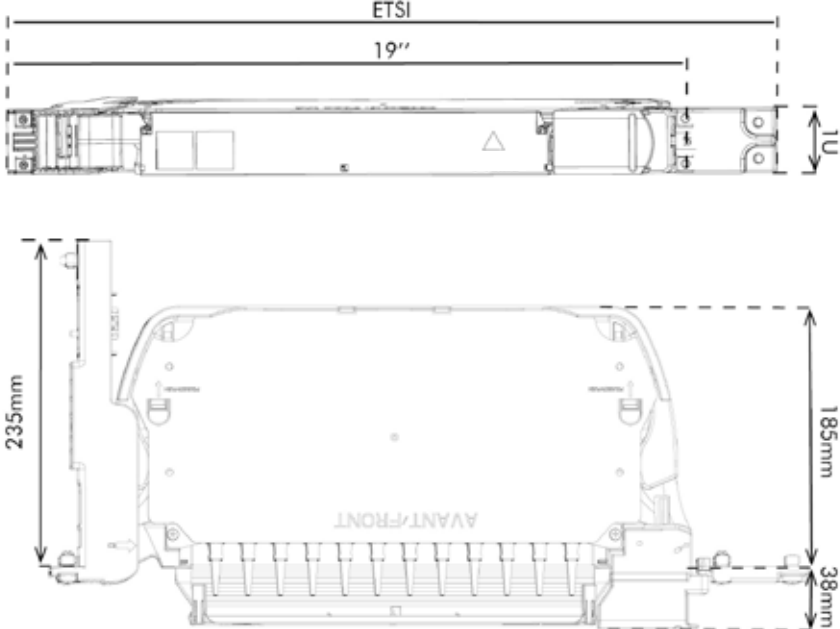
#### Subrack installation

- Standard offering: panels fixed on the front rails of the cabinets and an additional fixing point in the rear of the cabinet for enhanced stability.
- Alternative: panels with a metal subrack that need only fixing from the front and can be installed in any cabinet. Cables can be fixed directly on the metal chassis.

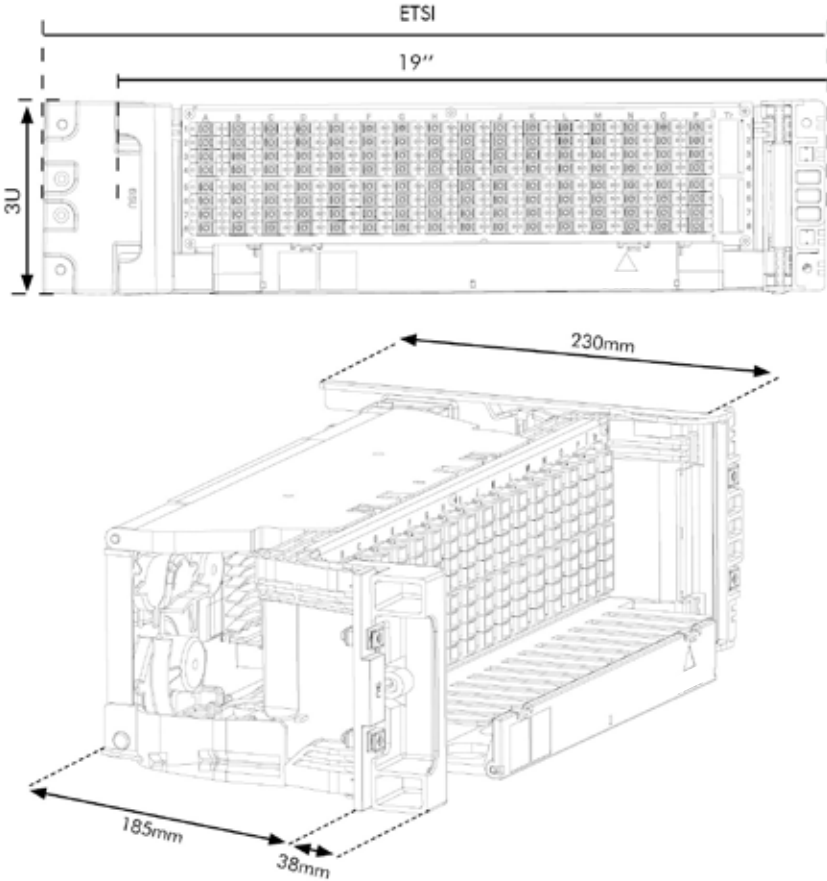


# DIMENSIONS OF XPLOER™ MODULES

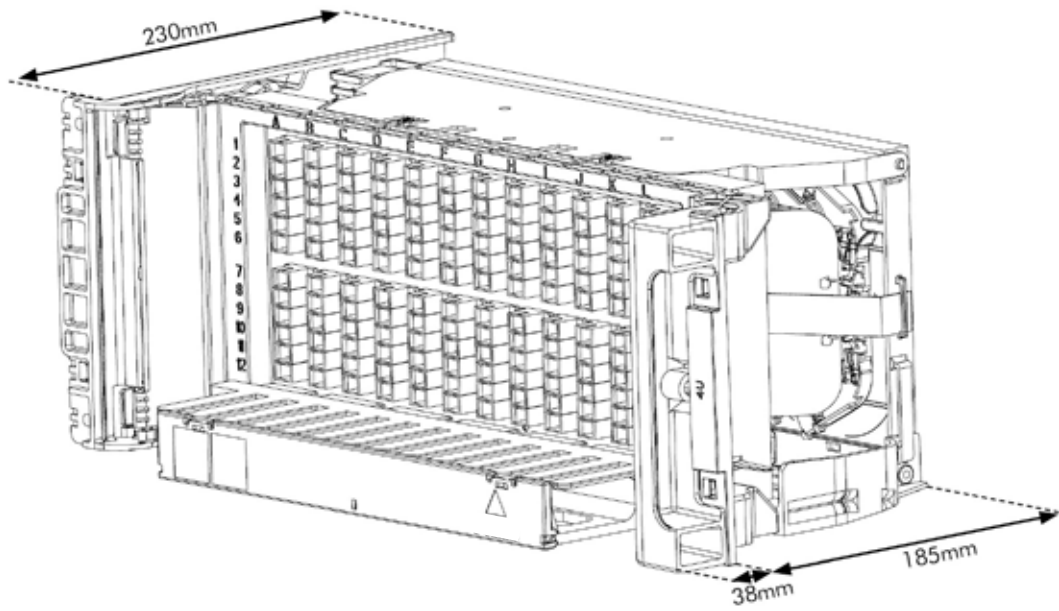
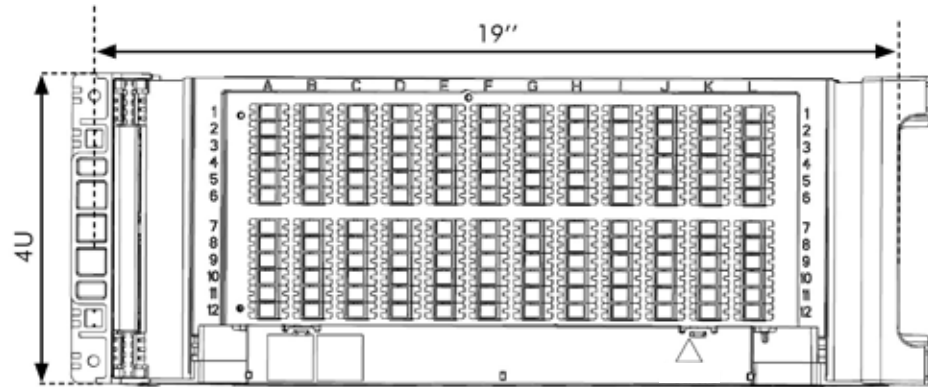
## Module 1U



## Module 3U



# Module 4U



# Optical Modules

## XPLORER™ 1U

### Patching

#### General characteristics

- Fixed chassis and swivelling module for patching
- Manufactured with fibre reinforced composite
- Symmetrical design so that left or right configuration can be chosen during installation
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- Integrated patch cord manager for guiding patch cords to the side
- Spool kit for patch cord management inside the rack
- A labelling front for patch cord management and identification
- Up to 48 SC/APC with translucent dust caps or LC/APC adaptors with White dust caps
- Kit for fixing 1x breakout in the fixed chassis
- Kit for fixing 4x breakouts in the swiveling module
- Overlengths of breakout organized in management rings



SC/APC connectivity	
<b>13200081</b>	XPLORER™ Patching Grade B 1U 12xSC/APC
<b>13200060</b>	XPLORER™ Patching Grade B 1U 24xSC/APC
<b>13200082</b>	XPLORER™ Patching Grade B 1U 36xSC/APC
<b>13200061</b>	XPLORER™ Patching Grade B 1U 48xSC/APC
LC/APC connectivity	
<b>13200083</b>	XPLORER™ Patching Grade B 1U 12xLC/APC
<b>13200062</b>	XPLORER™ Patching Grade B 1U 24xLC/APC
<b>13200084</b>	XPLORER™ Patching Grade B 1U 36xLC/APC
<b>13200063</b>	XPLORER™ Patching Grade B 1U 48xLC/APC



# Optical Modules

## XPLORER™ 1U

### Splicing Patching

#### General characteristics

- Fixed chassis and swivelling module for patching and splicing
- Manufactured with fibre reinforced composite
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- One comb for fixing of tubes or cables with a diameter of 5mm
- Integrated patch cord manager for guiding patch cords to the side
- Spool kit for patch cord management inside the rack
- A labelling front for patch cord management and identification
- Up to 48 SC/APC with translucent dust caps or LC/APC adaptors with White dust caps
- Up to 48 SC/APC or LC/APC splice ready Grade B pigtailed installed
- Fibre sequence of pigtailed according to TIA-598-C (Blue, Orange,..)
- Pigtailed installed for a left axis or right axis pivoting module
- 1 or 2 large splice trays installed compatible with G652.D, G657.A1 and G657.A2 fibres
- 24 splices per splice tray
- Splice cassettes for heat shrink protectors



SC/APC connectivity	
<b>13200052</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 12xSC/APC
<b>13200053</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 24xSC/APC
<b>13200054</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 36xSC/APC
<b>13200055</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 48xSC/APC
LC/APC connectivity	
<b>13200056</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 12xLC/APC
<b>13200057</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 24xLC/APC
<b>13200058</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 36xLC/APC
<b>13200059</b>	XPLORER™ Splicing and Patching Grade B 1U Left Axis 48xLC/APC

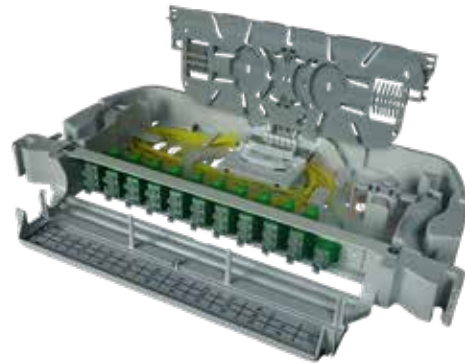
# Optical Modules

## XPLORER™ 1U

### Splicing Patching Splitting

#### General characteristics

- Fixed chassis and swivelling module for splitting, patching and splicing
- Manufactured with fibre reinforced composite
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- One comb for fixing of tubes or cables with a diameter of 5mm
- Integrated patch cord manager for guiding patch cords to the side
- Spool kit for patch cord management inside the rack
- A labelling front for patch cord management and identification
- Up to 32 SC/APC with translucent dust caps or 32 LC/APC adaptors with
- White dust caps for subscribers
- Splitters pre-installed: 1:8, 1:16 or 1:32
- Splitter uplink terminated with connector: connected to adaptor on front patch panel or terminated with splicing in a splice cassette
- Pigtails installed for a left axis or right axis pivoting module
- 1 large splice trays installed compatible with G652.D, G657.A1 and G657.A2 fibres
- Splice cassette for heat shrink protectors



SC/APC connectivity	
<b>13200085</b>	XPLORER™ Splicing and Patching Grade B 1U 32xSC/APC 1x 1:32
<b>13200086</b>	XPLORER™ Splicing and Patching Grade B 1U 32xSC/APC 2x 1:16
<b>13200087</b>	XPLORER™ Splicing and Patching Grade B 1U 32xSC/APC 4x 1:8
LC/APC connectivity	
<b>13200088</b>	XPLORER™ Splicing and Patching Grade B 1U 32xLC/APC 1x 1:32
<b>13200089</b>	XPLORER™ Splicing and Patching Grade B 1U 32xLC/APC 2x 1:16
<b>13200090</b>	XPLORER™ Splicing and Patching Grade B 1U 32xLC/APC 4x 1:8

# Optical Modules

## XPLORER™ 1U

### Storage



#### General characteristics

- Fixed chassis and swivelling module for storage
- Manufactured with fibre reinforced composite
- Symmetrical design so that left or right configuration can be chosen during installation
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- One comb for fixing of tubes or cables with a diameter of 5mm
- Patch cords are guided to the side with the integrated patch cord manager
- Spool kit included for patch cord management inside the rack
- 3 pivoting modules with each 2 storage zones
- 6 different zones for storage of overlengths of patch cords and cables

SC/APC connectivity	
10278809	XPLORER™ storage module

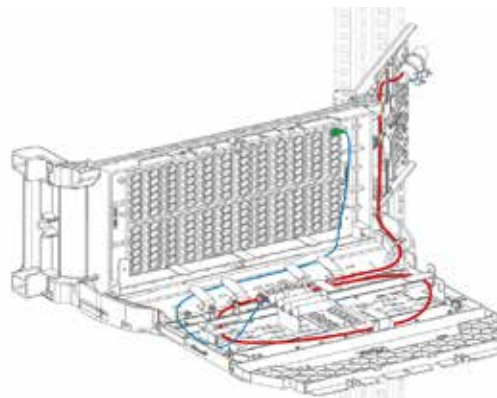
# Optical Modules

## XPLORER™ 4U

### Patching

#### General characteristics

- Fixed chassis and swivelling module for patching
- Manufactured with fibre reinforced composite
- Symmetrical design so that left or right configuration can be chosen during installation
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- Patch cords are guided per column from top to bottom and to the side with integrated patch cord manager
- Spool kit for patch cord management inside the rack
- Ports are identified by letters for the columns and numbers for the rows
- Up to 144 SC/APC with translucent dust caps or LC/APC adaptors with White dust caps
- Rear of patch panel can be opened and closed to have easy access during installation and maintenance
- Kit for fixing breakouts in the fixed chassis
- Kit for fixing breakouts in the swiveling module
- Overlengths of breakout organized in management rings



SC/APC connectivity	
<b>13200109</b>	XPLORER™ Patching Grade B 4U 144xSC/APC
LC/APC connectivity	
<b>13200110</b>	XPLORER™ Patching Grade B 4U 144xLC/APC

# Optical Modules

## XPLORER™ 4U

### Splicing Patching

#### General characteristics

- Fixed chassis and swivelling module for patching and splicing
- Manufactured with fibre reinforced composite
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- One comb for fixing of tubes or cables with a diameter of 5mm
- Patch cords are guided per column from top to bottom and to the side with integrated patch cord manager
- Spool kit for patch cord management inside the rack
- Ports are identified by letters for the columns and numbers for the rows
- Up to 144 SC/APC with translucent dust caps or LC/APC adaptors with White dust caps
- Up to 144 SC/APC or LC/APC splice ready Grade B pigtailed installed
- Fibre sequence of pigtailed according to TIA-598-C (Blue, Orange,..)
- Pigtailed installed for a left axis or right axis pivoting module
- 3 large splice trays installed compatible with G652.D, G657.A1 and G657.A2 fibres
- 48 splices per splice tray
- Splice cassettes for heat shrink protectors
- Rear of patch panel can be opened and closed to have easy access to splice cassettes during installation and maintenance



SC/APC connectivity	
13200091	XPLORER™ Splicing and Patching Grade B 1U Left Axis 144xSC/APC
LC/APC connectivity	
13200092	XPLORER™ Splicing and Patching Grade B 1U Left Axis 144xLC/APC

# Optical Modules

## XPLORER™ 3U

### Splicing Patching

### Splitting

#### General characteristics

- Fixed chassis and swivelling module for splitting, patching and splicing
- Manufactured with fibre reinforced composite
- Sockets and plugs for front installation for 9,5mm squares of 19 inch cabinets
- Metal cage nuts for 8,3mm and 9,5mm squares for 19 inch cabinets
- One metallic comb for fixing of tubes or cables with a diameter of 5mm
- Patch cords are guided per column from top to bottom and to the side with integrated patch cord manager
- Spool kit for patch cord management inside the rack
- Ports are identified by letters for the columns and numbers for the rows
- Up to 128 SC/APC for subscribers with translucent dust caps
- Splitters pre-installed: 1:16, 1:32 or 1:64
- Splitter uplink terminated with connector: can be connected to adaptor on front patch panel or terminated with splicing in a splice cassette
- Pigtailed installed for a left axis or right axis pivoting module
- 1 splice trays installed compatible with G657.A2 fibres
- Splice cassette for heat shrink protectors
- Rear of patch panel can be opened and closed to have easy access during installation and maintenance



SC/APC connectivity	
<b>13200111</b>	XPLORER™ Splicing and patching Grade B 3U left axis 128xSC/APC 4x 1:32
<b>13200112</b>	XPLORER™ Splicing and Patching Grade B 3U left axis 128xSC/APC 8x 1:16
<b>TBD</b>	XPLORER™ Splicing and Patching Grade B 3U left axis 128xSC/APC 16x 1:8

# Cabinets

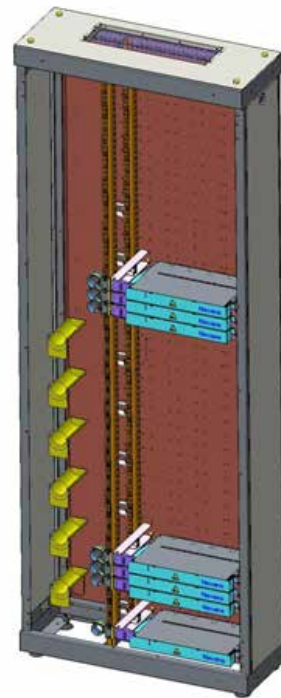
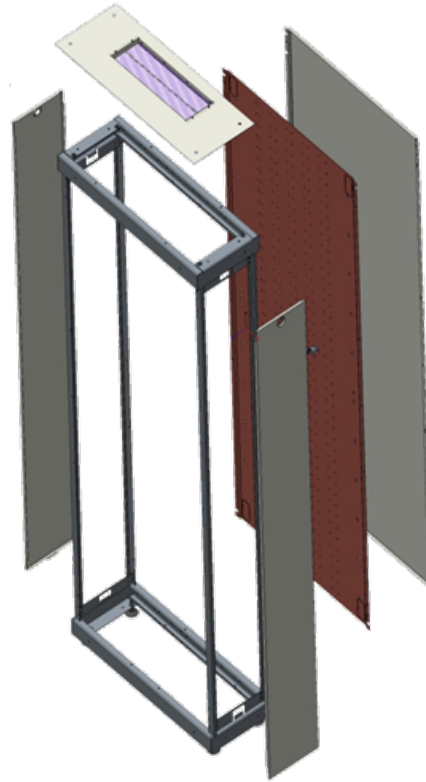
## OPTEASTAR 2+

### General characteristics

- Modular cabinet: 19" or ETSI compatible
- Standard width: 600mm or 900mm
- Height: 32U, 42U or 45U
- 300mm deep
- Patch cord management next to patch panels for the 900mm width panel
- Full metal or transparent door
- Different locking options
- Suitable for row configurations and back to back installations
- Cabinet can be fixed to the wall, floor, back to back or side by side
- Fibre cable entry from top or bottom of cabinet

Composition is configuration dependent, but for a 900mm wide cabinet typically includes

- 2 up and down welded frames, size 900x300
- 4 profiles for corners
- Roof with brushes and full baseplate interchangeable
- Fixing plate for clamping or fanout systems
- Bottom plate allowing management of tubes and cables behind the optical modules with rings
- Coiling area for patch cords overlengths with drums
- 2 removable side panels
- Rear panel
- 2 asymmetrical doors
- 4 adjustable feet
- Grounding point
- Wall fixing kit



## Cabinets POLYESTER



### General characteristics

- Street cabinets for FTTH networks
- Polyester reinforced fibre glass
- Resistant to corrosion and chemicals
- Light and easy to install
- Colour : Light Grey RAL 7035
- IP55 /IK10 protection
- Operating temperature from -35 to +85°C
- Doors opening maximum 110°
- A 3 points door locking system with triangular lock 8mm
- Fixed on concrete slab with screws
- Compatible with 19 inch pivoting modules
- Cable entry from the bottom
- Fixing plate for cables and cable fan-out in the lower part of the cabinet
- Fixing of tubes on rear plate of cabinet
- Cabinet depth: 300 mm

- Single door cabinet
  - 1x 19 inch rack on the right
  - Width: 750mm
  - 1x8U, 1x13U, 1x19U, 1x24U
  - Height: between 750mm and 1500mm with 250mm plinth included
  - Coiling area on the left for patchcord overlengths

- Double door cabinet
  - 2x 19 inch racks, 2x 24U, left and right
  - Width: 1500mm
  - Height: 1500mm with 250mm plinth included
  - Coiling area in the middle for patch cord overlengths

SAP-code	Description
10223428	Street Cabinet Polyester 19" 8U 750x750x300
10223426	Street Cabinet Polyester 19" 13U 1000x750x300
10223427	Street Cabinet Polyester 19" 19U 1250x750x300
10238290	Street Cabinet Polyester 19" 24U 1500x750x300
10238289	Street Cabinet Polyester 19" 2x24U 1500x1500x300



# Cabinets

## Single Skin Metal

### General characteristics

- Metal street cabinets for FTTH networks
  - Available in steel or aluminium. Aluminium cabinets are lighter and offer better protection against corrosion
  - Colour : Light Grey RAL 7035
  - IP55/IK10 protection,
  - Operating temperature from -40 to +65°C
  - Doors opening maximum 120°
  - A 3 points door locking system with triangular lock 8mm
  - A removable roof from inside to access the lifting eyes
  - Side panels can be opened from inside
  - Fixed on concrete slab with screws or with fixing frame
  - Compatible with 19 inch pivoting modules
  - Cable entry from the bottom
  - Fixing plate for cables and cable fan-out in the lower part of the cabinet
  - Fixing of tubes on rear plate of cabinet
  - Cabinet depth: 350 mm
- Cabinet with one door
    - 1 rack in 19" format, capacity 23U
    - Width : 750mm
    - Height : 1350mm including 200mm skirting board
    - Left-hand coiling area for management of excess patchcords
- Double-door cabinet
    - 2 racks in 19", 2x 28U, left and right
    - Width : 1500mm
    - Height : 1600mm with 200mm skirting included
    - Coiling area in the middle for management of patchcords overlengths
- Other dimensions available on request
  - Optional anti-display boss available on aluminum version
  - Anti-graffiti paint optional



SAP-code	Description
10237793	Street Cabinet Single Skin Aluminium 19" 22U 1350x750x350
10238393	Street Cabinet Single Skin Aluminium 19" 2x28U 1600x1500x350
10238415	Street Cabinet Single Skin Steel 19" 22U 1350x750x350
10238414	Street Cabinet Single Skin Steel 19" 2x28U 1600x1500x350

# Optical modular cable head

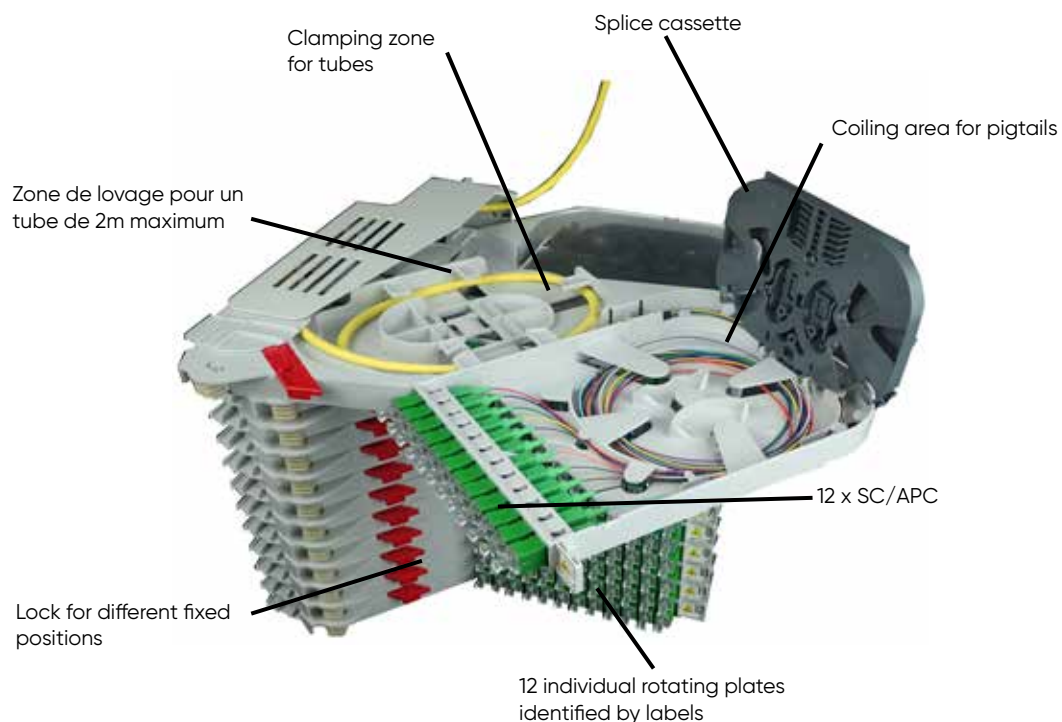
## TDCOP 144 OF

### General characteristics

- High capacity solution for Central Offices and Points of Presence (POP).
- Splicing, patching and splitting
- Lightweight solution with robust composite plates fitted on metal frame
- 12 modules with covers fitted per level
- 144 SC/APC per level
- Pre-installed with adaptors, pigtails or splitters

### Ease of installation and operation

- 3 Locked positions for ease of installation, maintenance and operation
- Light weight solution: one level weights less than 5 kg and be installed by one technician
- Each plate can be installed individually
- Individual management of 12 fibres per plate
- 2m of tube can be coiled per module: splicing possible close to fusion splicer

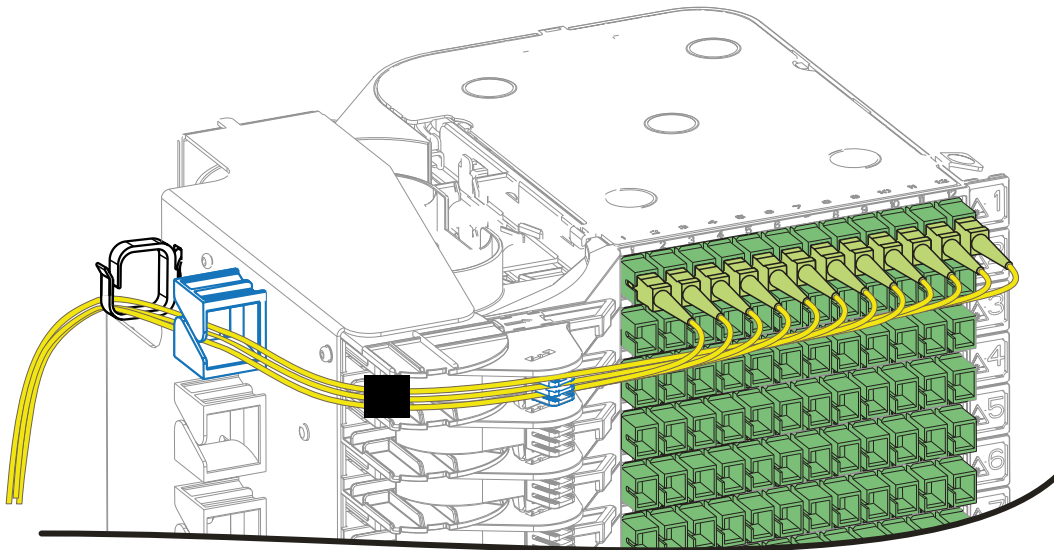


## Optical frames



### General characteristics

- Open frame for fixing of Optical Cable Heads
- Two aluminum profiles with jumper rings and fixing screws for cable heads
- Typical 8 levels for optical cable heads with a 255mm pitch
- Additional options for 5 to 10 levels
- Floor clearance for each frame is 700mm
- Optional front, rear and side protective strips
- Patch cords guided and fixed on the module
- Patch cords arranged with rings on the open frames



SAP-code	Description
13200117	TDCOP splicing with 12 modules of 12 SC/APC adaptors and pigtails installed
13200118	TDCOP splicing module with 12 SC/APC and pigtails installed
13200119	TDCOP breakout with 12 modules with 12 SC/APC adaptors
13200120	TDCOP breakout module with 12 SC/APC adaptors
10273748	Open frame with 8 levels

An aerial photograph of a town with many houses and a church, viewed through a circular teal frame. The word "Service" is written in white text in the center of the teal circle.

# Service

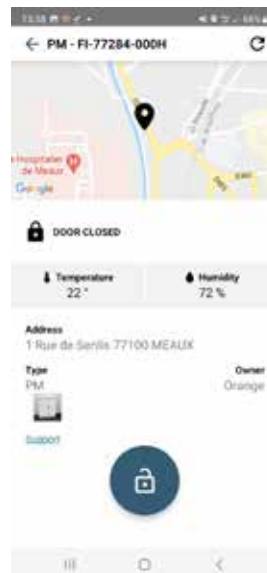
# INFRABIRD™

## Access control and network monitoring service

### 1. Description

Easy to Deploy	Web Plateforme	Mobile application
<p>Suitable for every cabinets</p> <p>Zero drilling for installation</p> <p>Full mobile compatibility (Apple, Android, Huawei)</p> <p>No physical key, no battery in the lock</p>	<p>Supervision of the cabinet fleet and maintenance</p> <p>Access to maintenance history</p> <p>Simplified management of access rights</p> <p>Drives optical switches to perform network tests</p>	<p>Easy to open from a smartphone</p> <p>Address search and location of cabinets</p> <p>Alert display in real-time</p> <p>Intervention support</p> <p>Avoid accidental disconnection of neighbouring lines</p>

### 2. Cabinet monitoring



#### Benefits

- Modular cabinet: 19" or ETSI compatible
- Mobile phone replaces physical key to open street cabinets
- Automatic detection and unlocking of the cabinet using smartphone
- Geolocation of the position of nearby cabinets
- Consultation of current alerts
- Possibility to leave a comment on a cabinet to identify non-conformities

#smartconnection



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