THE SCANDINAVIAN WAY

Outdoor enclosure solution for FTTH networks

triarca.dk

Rollout and maintenance of fiber optical networks without regard to the weather

Reliable and proven solution with a track record of more than 20 years in Scandinavia

The Scandinavian Way

Rollout concept with a 'homes passed' rate of more than 85%.
Proven method over 20 years.

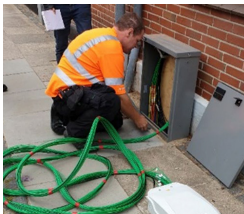**1** Easy handling of the outdoor enclosure by one person

2 Solutions prepared for ducts and fiber optic cables

3 Removable connectivity for splicing of subscribers inside van

4 Connecting new subscribers 24/7/365

5 Splicing of new subscribers in a fully controlled environment

Low installation costs
Reduced time consumption results in faster project implementation.

Faster rollout
365 working days per year independent of the weather.

Smaller enclosures
Compact outdoor enclosures closer to the subscriber

Frequently Asked Questions

Is there any risk for mechanical damage of fiber cables and connectivity during the splice work?
From 20 years of experience in Scandinavia the method with using removable connectivity has proven that the risk is very limited.

Is the solution suitable for both PON and PtP?
The removable connectivity can be used in any FTTH technology.

Why is the solution less dependent of splicers?
The technicians can work far more efficient in a controlled environment and working conditions inside the splice van.

Why do you claim that the solution has less costs in terms of man hours?
Because the solution is easy handled by one person and the spicing work can be done 24/7/365 independent of the weather.

Why is the enclosure lower and more compact than other solutions?
Because there is no need for splicing inside the enclosure and there are several different subscribers on the same splice tray.

Why do you say that there is only need for one person instead of two regarding the handling?
The enclosure is up to 50% lighter in weight and up to 50% smaller compared to other solutions in the market and can easily be handled by one person.

Does the solution provide quality and stable internet connection?
Our customers – the network owners in Scandinavia - are very satisfied and do not experience any major obstacles with our access points.

How does the enclosure cope against rain, condensation, frost and rodents?
Our metal enclosures is often with a low IP rating preventing condensation but at the same time providing protection against known weather conditions in Scandinavia. Metal enclosures also provide optimal protection against rodents.

Does the advanced FTTH access solution offer an easy way of numbering connections and excellent overview of subscribers?
Our advanced access solutions provides an excellent and fast way of fixing the ducts and keeping an overview of each subscriber to avoid any mistakes when connecting subscribers.

Is the advanced access solution complete or do we have to order other accessories?
Our advanced FTTH access points can be supplied exactly to any customer demand - or accessories for duct and fiber cable management can be ordered separately for later installation.

Why do you say that the splicing can be done independent of the weather?
Because the spicing work can be done in the splice van, splicing can take place 24/7/365 independent of any weather conditions.

Is Triarca outdoor access solutions used anywhere else in Scandinavia?
Yes our solutions has a proven track record of more than 20 years on the FTTH market. Triarca is supplying outdoor access solutions to a large number of blue chip customers in Scandinavia.

Is the solution suitable for all types of connectivity?
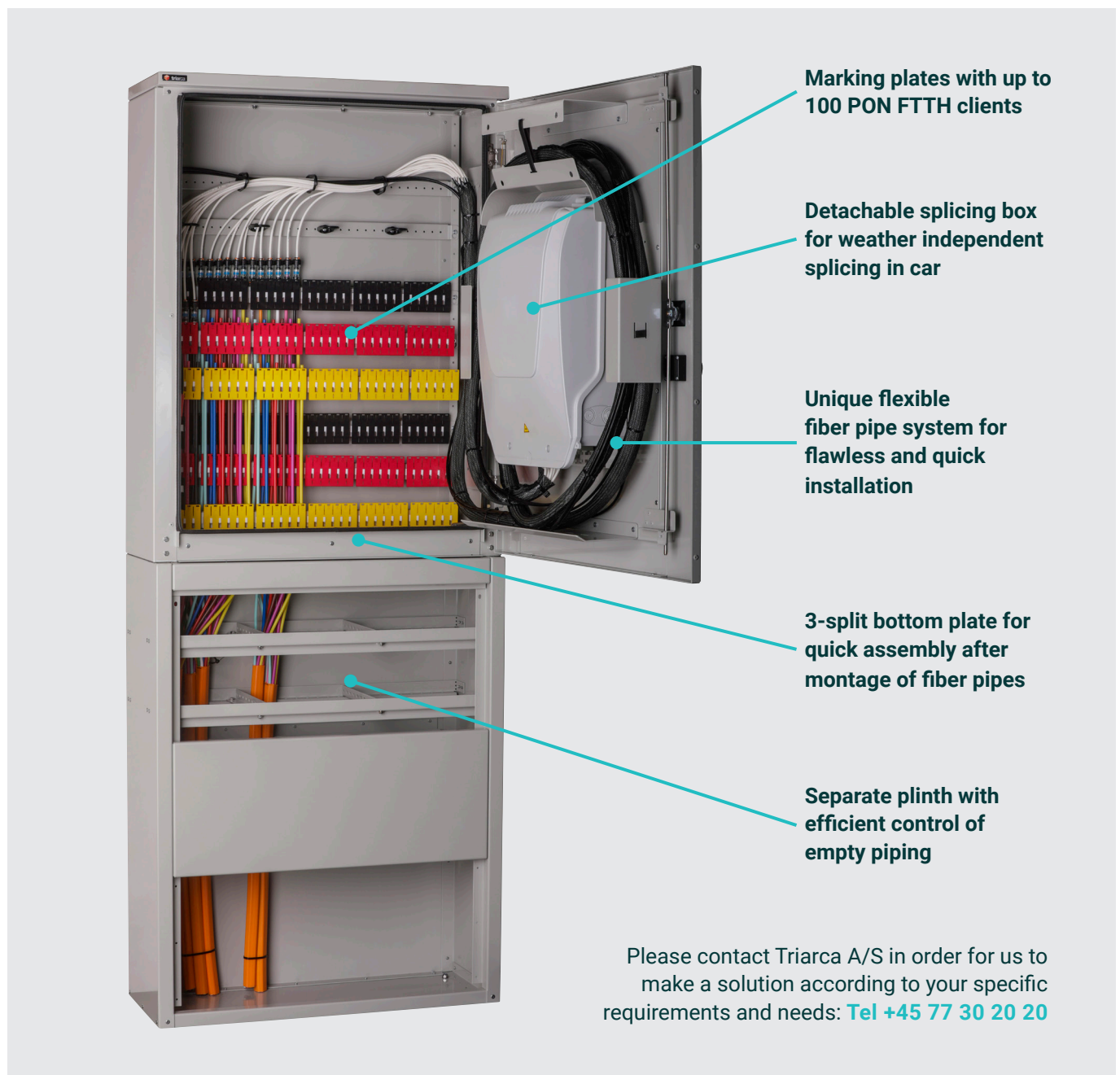Our solutions can be adapted to any known connectivity in the market.

Overview of the Fiber Enclosure

Our outdoor FTTH access are either manufactured in high quality galvanised steel or aluminium.

The outdoor enclosure comes in many sizes and different colours. Often our customers can choose their own locking system and custom designed duct- and fiber management.

In addition to this the enclosure can be fitted to any specific requirement:
• Doors and locking systems
• In-ground root prepared for ducts and with rodent protection
• Integrated in-ground root for easy installation
• Back boards designed to fit your connectivity including duct- and fiber cable management

Marking plates with up to 100 PON FTTH clients

Detachable splicing box for weather independent splicing in car

Unique flexible fiber pipe system for flawless and quick installation

3-split bottom plate for quick assembly after montage of fiber pipes

Separate plinth with efficient control of empty piping

Please contact Triarca A/S in order for us to make a solution according to your specific requirements and needs: **Tel +45 77 30 20 20**

Standard or Custom Designs

Triarca offers an extensive range of ready-to-order enclosures and optional accessories, including outdoor access enclosures designed for specific makes of connectivity.

Furthermore, we offer customised outdoor enclosure solutions designed to meet specific needs and requirements. The fiber optical access enclosures range from single and small 6-12 connections, to large enclosures for 576 connections or more.

With Triarca enclosures you get:

· Enclosure solutions for outdoor wall mounting and in-ground installation

· Time-saving solutions available for mounting connectivity, ducts and fiber management

· A wide range of IP classification available

· Enclosures for use in combination with manholes

· Enclosures in high grade galvanized steel or aluminium and protected with polyester powder coating in the desired colour

· A wide range of accessories, including connectivity, backboards, bottom plates, duct- and fiber cable management, 19" racks, etc.

Our manufacturing lines are designed to combine flexibility with the economic advantages of a highly automated production. Small batches of enclosures are produced with almost the same efficiency as thousands.

The PTB Enclosure Family

Fiber distribution enclosures for passive FTTH-equipment

EN 60529   EN 62262   EN 62208

Technical description

• For PON and PTP FTTH-purposes

• Low weight and elegant design with up to 24 clients

• Prepared for removable FTTH connectivity with empty tube and fiber management

• Compact solution for burial directly in the ground. Locking plates at the bottom to secure that the solution may not be removed from the ground

• Particularly for use in areas with low population

5 good reasons to choose PTB

⊘ Very compact solution with limited demands for space

⊘ Quick and easy to install and easy access for installation

⊘ Exists in two sizes for 12 or 24 client connection

⊘ Long life span and no maintenance

⊘ Detachable splicing box for weather independent splicing, without workplace coverage

Basis enclosure	PTB-S	PTB-M
Exterior dimension h x w x d (mm)	1004x205x60	1004x230x80
Mounting size h x w x d (mm)	700x171x50	700x196x70

Common for the PTB-family

• Great flexibility that fits many types of smaller detachable splicing boxes
• Polyester surface in several colors - ask us, please, for the possibilities
• High quality galvanized steel, with low carbon gives 25+ years expected life span
• High quality galvanized steel with low carbon containment, gives 25+ years expected life span
• Compact and simple usage, may easily be handled by one person

The SCC Enclosure Family
Outdoors fiber distribution enclosures for passive FTTH-equipment

EN 60529 EN 62262 EN 62208

Technical description

• For PON and PTP FTTH-purposes

• Up to 96 clients

• May be fitted for specific FTTH connectivity and fiber management equipment

• Compacts with integrated and adjustable buriable plinth. Large removable front end ensures good working conditions.

• With or w/o ventilation gills in the front door, for a natural ventilation and condensation-free solution

5 good reasons to choose SCC

☑ Compact solution – limited demands for space, simple management with empty pipes and discrete design

☑ Quick and easy installation by only one person

☑ Robust construction with six sized that potentializes a cost-optimal choice

☑ Long life span and minimal maintenance, with gives a low, total TCO

☑ Detachable splicing box for weather-independent splicing, without workplace coverage

Basis enclosure	SCC 198	SCC 264	SCC 330	SCC 396	SCC 462	SCC 594	SCC 792
Exterior dimension h x w x d (mm)	700x198x198	700x264x198	700x330x198	700x396x198	700x462x198	700x594x300	700x792x300
Mounting size h x w x d (mm)	600x160x171	600x220x171	600x316x171	600x382x171	600x448x171	600x580x273	600x738x273

Common for the SCC-family
• Fits several types of detachable splicing box solution?
• Possibility for other optional locking systems
• Polyester surface treatment in other colors – ask us for potential choices
• High quality galvanized steel with low carbon containment, gives 25+ years expected life span
• Compact and simple use that may easily be handled by merely one person

The Trilite Enclosure Family
Fiber distribution enclosures for passive FTTH-equipment

IP44
EN 60529

IK10
EN 62262

EN 62208

Technical description

• For PON and PTP FTTH-purposes

• Up to 96 clients in splicing boxes mounted on assembly plates with fiber management

• Can be adjusted specific FTTH connectivity and fiber cable management equipment

• Compact with integrated and adjustable burial plinths with relief for empty pipes

• Produced from hi quality aluminum with very low weight and extremely long life time

5 good reasons to choose Trlite

✓ Compact solution that may be handled by one person. Weight approx. 50 per cent lower than traditional galvanized steel enclosures

✓ Robust construction with integrated removable plinth for quick and easy installation

✓ Robust construction with six sized that potentializes a cost-optimal choice

✓ Extremely long life span and no maintenance, which gives a low, total TCO

✓ Detachable splicing box for weather-independent splicing, without workplace coverage

Basis enclosure	Trilite 9	Trilite 12	Trilite 15	Trilite 18	Trilite 21	Trilite 27
Exterior dimension h x w x d (mm)	700x211x212	700x277x212	700x343x212	700x409x212	700x475x212	700x607x212
Mounting size h x w x d (mm)	700x160x175	700x220x175	700x285x175	700x350x175	700x420x175	700x550x175

Common for the Trilite-family
• Fits several types of splicing boxes
• Possibility for added choices of further locking systems than standard triangular lock
• Polyester surface treatment in grey and green as standard colors. Other colors on request
• High quality aluminum with 50+ years life span
• Sustainable product with no risk of corrosion even due to mechanical influences

The FK Enclosure Family
Outdoors fiber distribution enclosures for passive FTTH-equipment

EN 60529

EN 62262

EN 62208

Technical description

• Solution for PON and PTP FTTH purposes with built in hidden ventilation that secures condense free environment

• Extra depth secures space for many types of connectivity with connection of up to 144 clients

• May be fitted for specific FTTH connectivity and fiber management equipment

• Separate buriable plinths and large detachable front door

• Spacious solution with saddled roof construction and good access

5 good reasons to choose FK

☑ Saddled roof construction ensures spaciousness and detachable front door ensures good access

☑ Quick and easy to install. Good relief options for empty pipes

☑ Deliverable in two standard sizes

☑ High quality with long life span and minimum maintenance

☑ Detachable splicing box for weather-independent splicing, without workplace coverage

Basis enclosure	FK 530	FK 760
Exterior dimension h x w x d (mm)	985x530x315	985x3760x315
Mounting size h x w x d (mm)	800x440x285	800x650x285

Common for the FK-family

• Fits several types of splicing boxes
• Lock with Tear-drop protection and optional other locking systems
• Other colors - please ask us for further information
• High quality galvanized steel with low carbon containment, gives 25+ years expected life span
• The solution is combined by separate plinth and enclosure, which secures relatively low weight per part

The FT Enclosure Family
Fiber distribution enclosures for passive PON FTTH-equipment

IP55
EN 60529

IK10
EN 62262

EN 62208

Technical description

- Dustproof solution which is primarily is used for PON FTTH-purposes

- Up to 576 PON clients with splitter solution

- May be fitted for specific FTTH connectivity and fiber management equipment

- Enclosures and buriable plinth to be delivered in two separate parts

- Closed buriable plinth with empty pipe-management and dust proof bottom plate solution

5 good reasons to choose FT

- ☑ Solution that may fathom a large number of clients with a passive splitter solution

- ☑ Robust, vandal-proof construction with three-point locking system

- ☑ Available in 3 heights, which fit on the same buriable plinth

- ☑ Possibility of mounting a rack in the back or mounting plate solution

- ☑ Rodent proof solution for optimum protection of FTTH installations

Basis enclosure	FT 785 L	FT 785 M	FT 785 H
Exterior dimension h x w x d (mm)	800x785x300	1020x785x300	1540x785x300
Mounting size h x w x d (mm)	750x710x250	970x710x250	1480x710x250

Common for the FT-family
- Possibility for mounting plate or racks
- Three point locking system and possibility for two locking cylinders in swing handle
- Polyester surface treatment. Other colors - please ask us for further information
- High quality galvanized steel with low carbon content and 25+ years expected life span
- Bottom plate may be adjusted per the clients wishes for specific empty pipes and fiber cables

The Trilite F365 Enclosure

Fiber distribution enclosures for passive PON FTTH-equipment

IP55
EN 60529

IK10
EN 62262

EN 62208

Technical description

- Primarily for passive PON FTTH-equipment

- Empty pipe and fiber management with marking plates for up to 100 PON FTTH clients

- May be adjusted for specific FTTH connectivity equipment and client adjusted fiber management

- Separate rodent-proofed buriable plinth with solid empty pipe management

- Produced from aluminum with low weight and polyester surface treatment

5 good reasons to choose Trilite F365

- ☑ Solution to be handled by one person with a good overview of empty pipes, during installation

- ☑ Robust construction with low weight, for quick and easy installation

- ☑ Unique flexible fiber and empty pipe management system with a good overview for quick installation

- ☑ Extremely long life span without maintenance, that gives a low, total TCO

- ☑ Detachable splicing box for weather independent splicing (24/7/365), without decoverage of work site as splicing work takes place in a splicing vehicle

Basis enclosure	Trilite F365
Exterior dimension h x w x d (mm)	1030x785x300
Mounting size h x w x d (mm)	980x716x250

Common for the Trilite F365-family

- Fits several types of splicing boxes
- Possibility for choosing other locking system with one or two locking cylinders
- Surface treatment with polyester. Several colors - please ask us for more information
- High quality aluminum with 50+ years life span
- A sustainable product with great flexibility with unique empty pipe management, customer labeling

The CCO Enclosure Family

Climate controlled fiber distribution enclosure for active FTTH-equipment (mini-POP)

IP55
EN 60529

IK10
EN 62262

EN 62208

Technical description

- Climate controlled solution for PON and PTP FTTH purposes

- Up to 576 PON Clients with splitter solution

- May be fitted for specific FTTH connectivity and fiber management equipment

- Double-walled vandal-proofed construction for optimum safety

- Prepared for climate control pf active equipment

5 good reasons to choose CCO

- Optimum climate control of active FTTH equipment

- Robust construction and great flexibility

- Robust construction with four sizes that potentializes a cost-optimal choice

- Long life span and low maintenance cost, which gives a low, total TCO

- Several possibilities for customer-fitted solution and combination of two units

Basis enclosure	CCO 136	CCO 138	CCO 176	CCO 178
Exterior dimension h x w x d (mm)	1400x754x630	1400x754x830	1800x754x630	1800x754x830
Mounting size h x w x d (mm)	1250x650x530	1250x650x730	1650x650x530	1650x650x730

Common for the CCO-family

- Great flexibility that fits many types of smaller detachable splicing boxes
- Polyester surface in several colors - ask us, please, for the possibilities
- High quality galvanized steel, with low carbon gives 25+ years expected life span
- High quality galvanized steel with low carbon containment, gives 25+ years expected life span
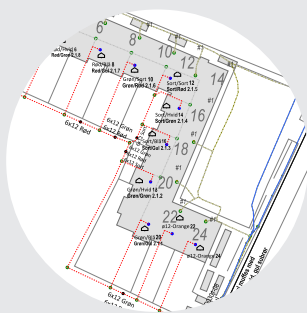- Compact and simple usage, may easily be handled by one person

Customised Enclosure Solutions Cover Your Specific Project Needs

The customised solution

Our core competence is to design outdoor enclosure solutions to each project with the aim of delivering the desired performance combined with low TCO costs and faster installation.

The base in our deep knowledge and understanding of FTTH network plans, available connectivity solutions, and our customers workflow.

We always take great pride in delivering high quality customised enclosures with pre-mounted or prepacked connectivity for easy installation in the field.

1. Network plan

2. Connectivity

3. Workflow

In close collaboration, we develop tailor-made outdoor FTTH solutions that create optimal value for your business.

4. Individual design

5. Flexible production

6. Premounted outdoor enclosures

Who We Are

Triarca is the main supplier to several blue-chip customers in the northern Europe. During the last 20 years we have delivered over 150,000 outdoor enclosures for both active and passive FTTH networks.

Our headquarter, production and R&D department is situated in Denmark. We have over 80 employees and sales offices in Sweden and Germany. We are also co-operating with several wholesalers and distributors in many European countries.

Since the 60s, we have been pioneers in the Scandinavian market, and we are recognized for providing specially developed solutions for power distribution networks and FTTH networks.

With our engineers, specialists, and production staff, we have the competencies to develop value-creating outdoor solutions in close collaboration with our customers.

Triarca have been pioneers in developing enclosure solutions for different communication technologies since the 60s.

"We support the growing demand for electrification and digitalisation of societies with optimal solutions for power distribution, infrastructure for EV and FTTH networks"