

Telecom product range



 **ACOME**

Summary

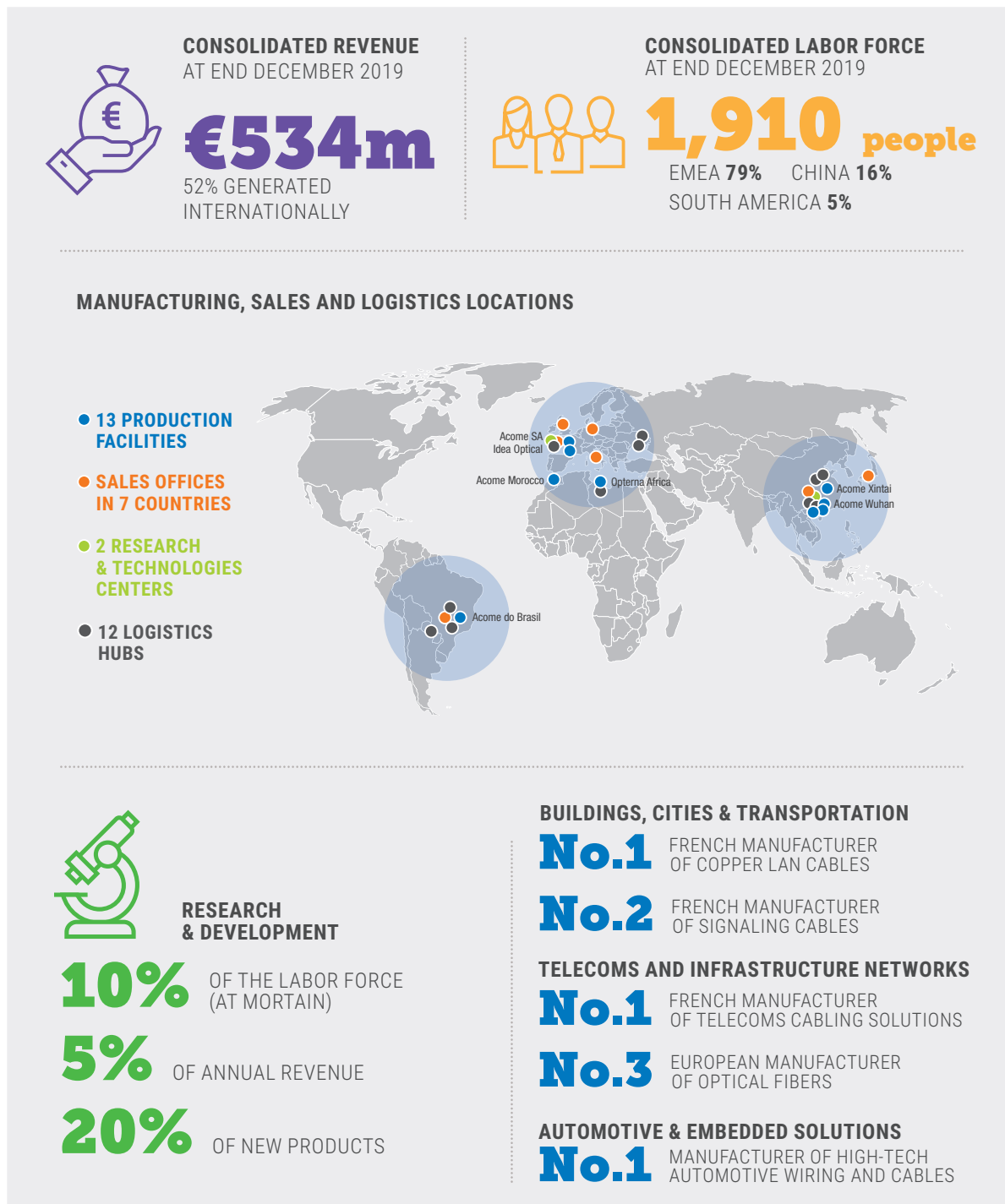
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Key figures

Since 1932, we have been enabling the future

Throughout the supply of products in three of the world's key markets : **Telecommunications, automotive and Building.**

As the French largest cooperative and participative company, we have established strong relationships with our customers and partners by providing them innovative solutions and reliable performance and support.



Our values



Corporate Social Responsibility (CSR)

For the third consecutive year, we were awarded Gold Certification in 2018 by EcoVadis, the independent CSR rating agency. Our sustainable use of resources and efficient waste management distinguish us from our competitors.

Our CSR performance is driven by 4 priority axes :

ACOME MODEL : Values and ethics

- Diversity and equal opportunities
- Gender parity
- Involvement in our company's life
- Territorial anchoring
- Fair regulatory practices
- New certifications
- Responsible purchasing

Human at the core of the system

- Ensure our employees a fair & safe working space
- Enhance their employability by focusing on training
- Promote their well-being and personal development
- Focus on the quality of working life

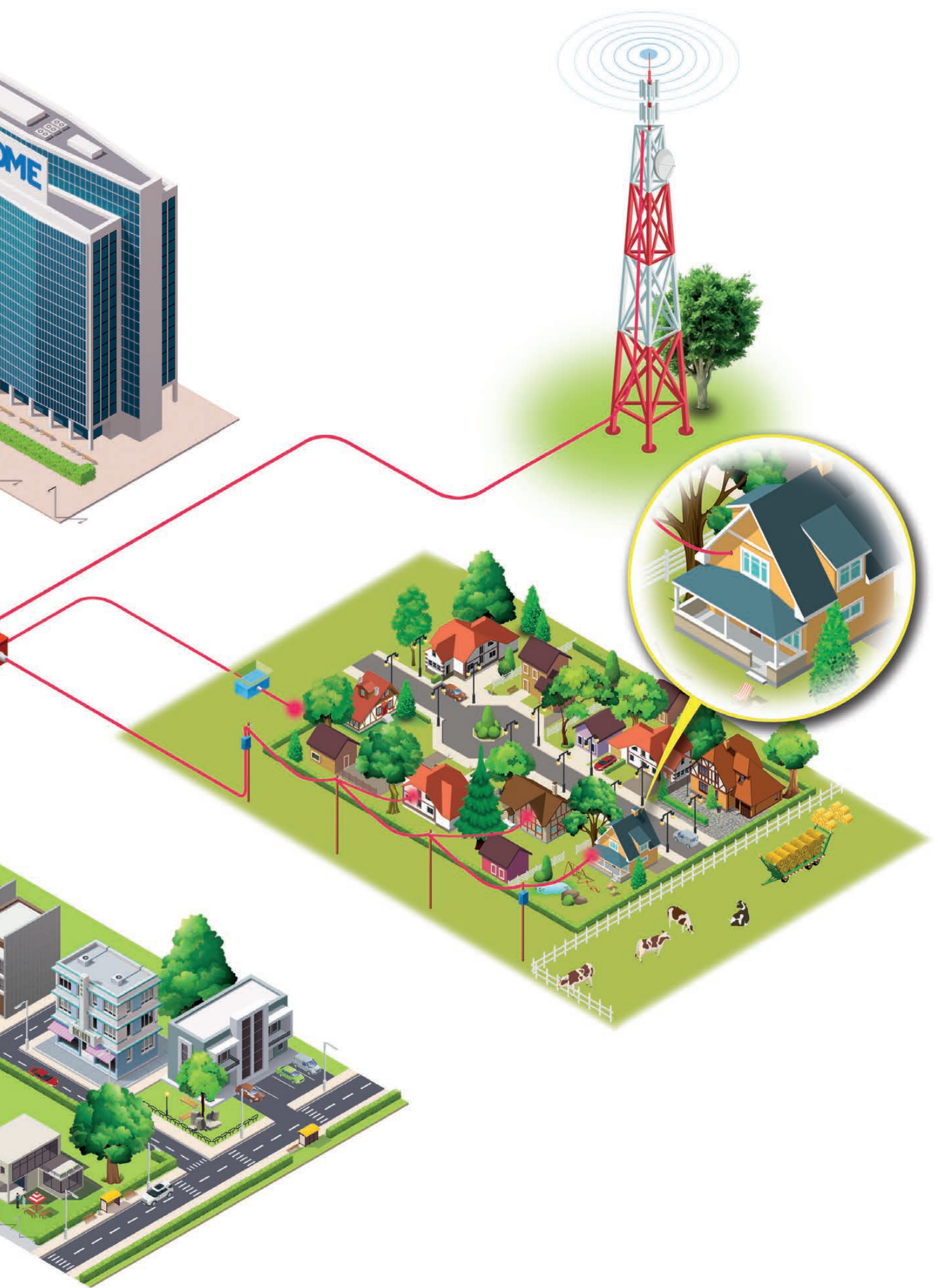
Reliable, efficient and environmentally friendly manufacturer

- Mastering and reducing industrial emissions and discharges (into air, water and soil)
- Controlling and optimizing consumption of natural resources (energy and raw materials)
- Prevent climate change and preserve biodiversity
- Conducting action plans on production waste

A responsible offer to meet our customer's expectations

- Promoting the adoption of environmental principles from suppliers and service providers
- Establish ourselves closer to our customers to optimize industrial performance and improve customer service in an eco-responsible vision





Solutions for

Central Office and backhaul

Application:

CCS cables series are dielectric cables suitable for burial and long-distance applications in optical backhaul networks and in metropolitan area networks. Their mechanical characteristics and design make the CCC series compatible with installation by pulling through ducts.

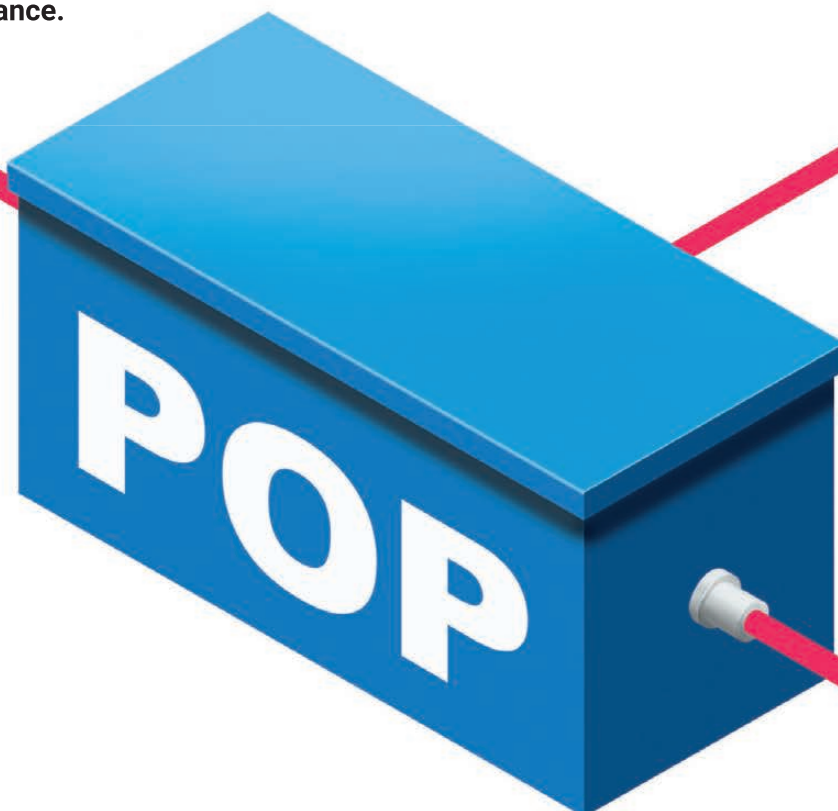
Steel armoured option (ie CCC1780) makes those product highly ruggedized for being directly buried.

Benefits:

Compact-Tube® technology allows fast, simple and safe use for fibre access without special tools

Especially resistant to crushing: it can be installed in the ground over very long lengths

Low friction PEHD sheath for long-span blowing performance.



Overhead optic cables



CCS series	Span up to 200m
1530	Up to 144fo

Duct backbone optic cables



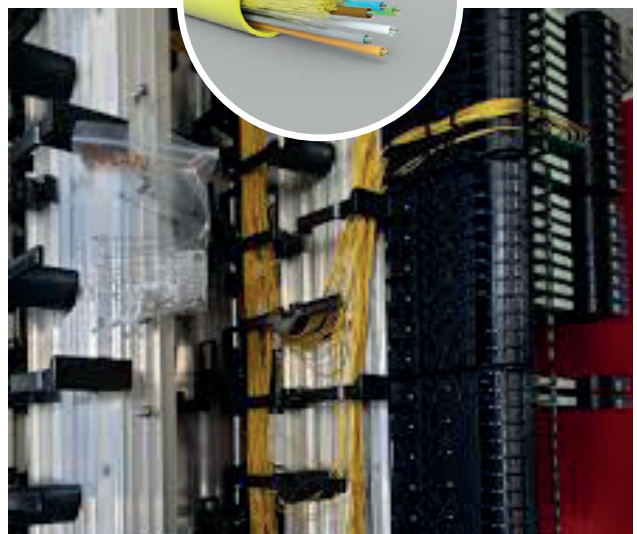
UNC series	High capacity
1536	Up to 144fo

Optic cables for sewer or directly buried



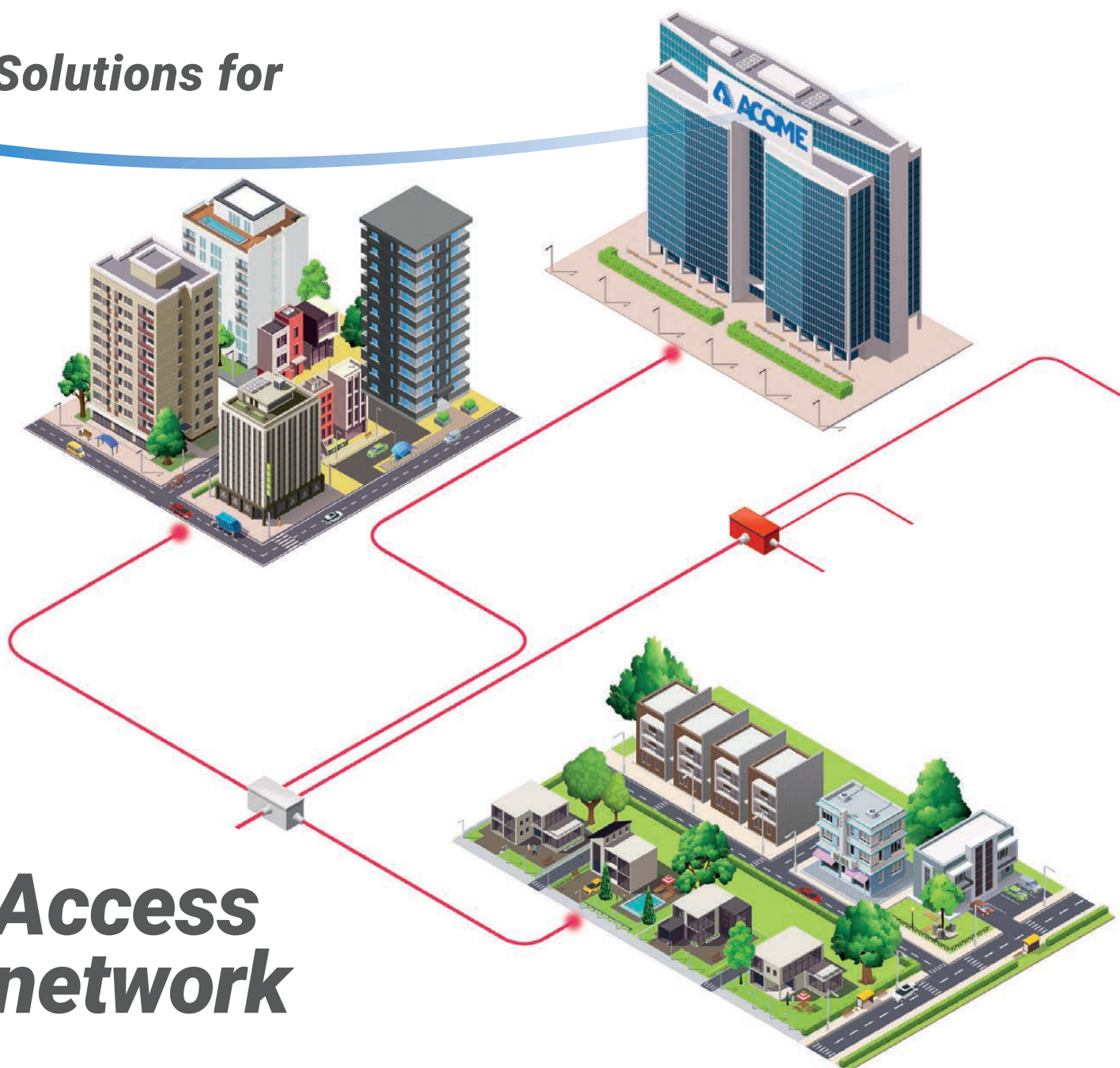
CCC series	Reinforced protection
1574 - 1575 - 1582 1378 - 1577	Up to 288fo

Duct backbone optic cables



CSX series	Fire rated Cca
1811	Up to 288fo

Solutions for



Access network

Application:

UND ranges represent ACOME's distribution solution for FTTH networks.

The UND1534 range provides an overhead solution that allows operators to link optical connection nodes to any part of their FTTx network:

It allows for spans up to 70m (in specific weather conditions and installed using dedicated anchoring and suspension clamps).

This range can also be blown and pulled through ducts thanks to its mechanical properties.

The ACOME Façade-PACe PAD1504 range is particularly suitable for massive deployment of optical fibres on streets where several small buildings or

houses are located next to each other.

These products have been designed for bypassing optical fibres at any point of the cable as part of a direct/buried/façade distribution network, from the distribution point to the subscribers' homes.

The cables can therefore be installed over short distances in ducts.

Micro-modules are extracted on the façade.

By combining this cable with the FaçadePACe box and the shutter clip, the installed solution provides a better visual aesthetic compared to a standard installation system.

Micro-modules can be accessed on cables mid-span without disconnecting them with the IC5006 tool.

Overhead optic cables



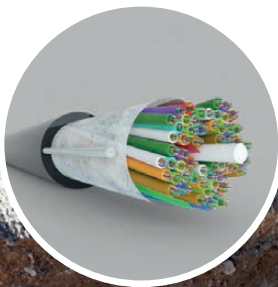
UND series	Span up to 70m
1344 - 1534	Up to 288fo

μduct optic cables



MCD series	High density
1510 - 1520 - 1521HD - 1522HD	Up to 288fo

Duct optic cables



UND series	High capacity
1533 - 1558	Up to 864fo

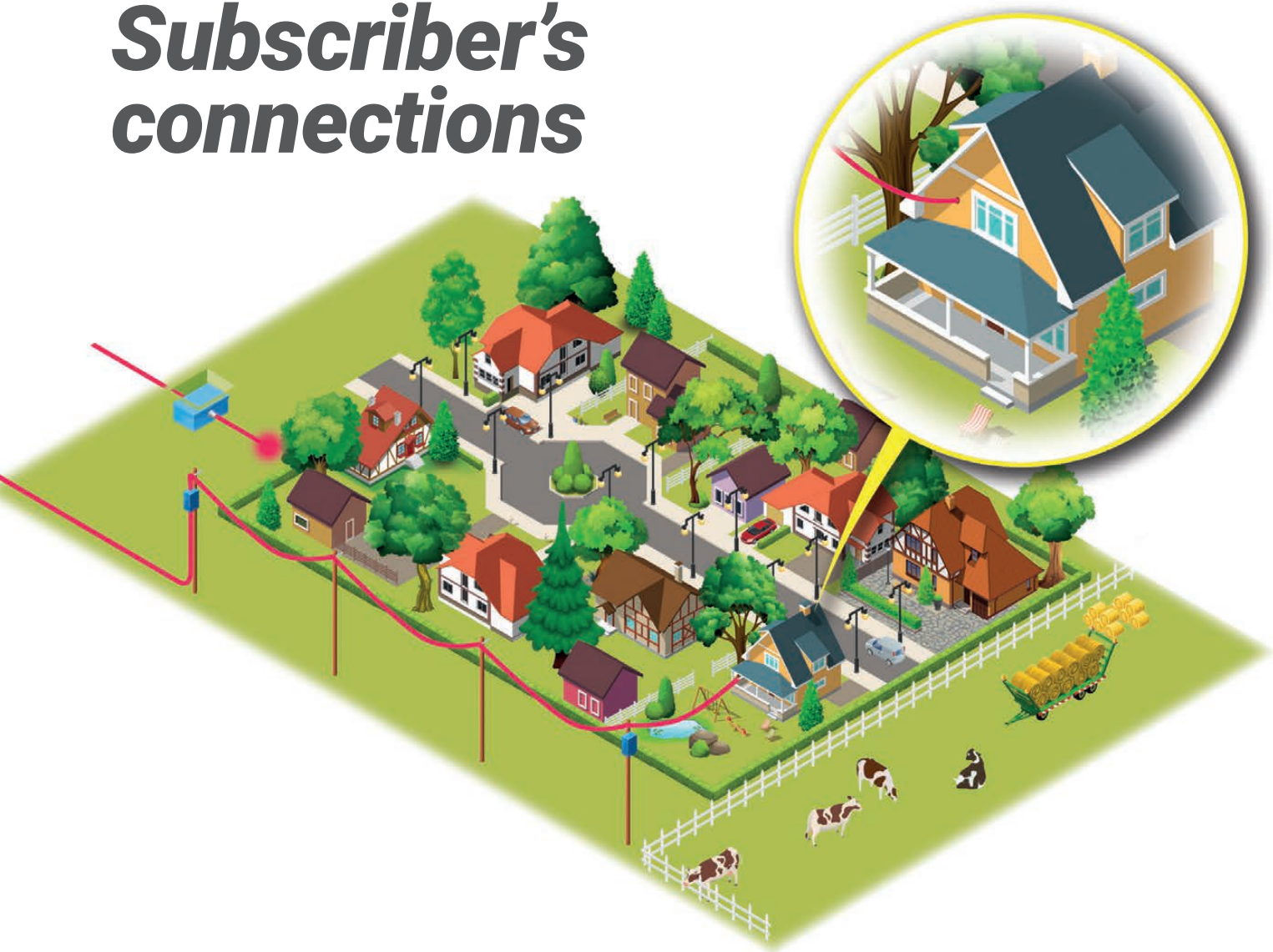
Facade and discreet distribution



PAD series	Permanent Access
1504	Up to 288fo

Solutions for

Subscriber's connections



Application:

ACOME's UNB connection cable ranges have been designed to meet the connection needs of FTTH access networks.

UNB1625 and UNB1627 series cables ensure the wiring between the external connection point and the junction box located in the building, for pipe, façade or overhead installation.

The HDPE outer jacket can be removed over several metres, freeing an LSOH-FR (1) subscriber line that can then be stripped and laid in a cable tray or glued down to the subscriber's optical termination outlet inside.

ACOME Home-PACe ranges provide a solution for installing riser cables; whether directly or in ducts; in utility shafts and common areas found in buildings.

The special design of the Home-PACe PAD1826 offers permanent access to fibres through the sheath for splicing with subscriber cables. Micro-modules containing 2 to 12 fibres, according to the number of residences to connect per floor (utility shaft installation).

Highly recommended when wiring large buildings requiring hundreds of fibres.

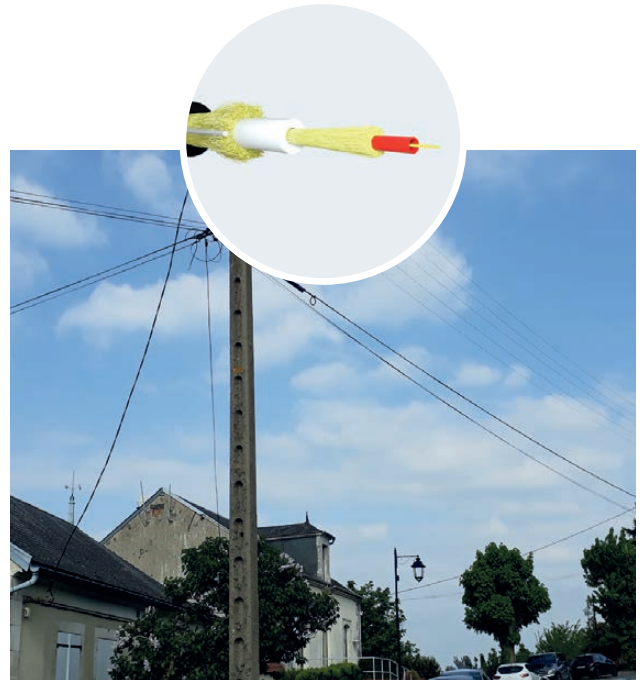
MDU: Building connection optic cables



DONNÉES THD

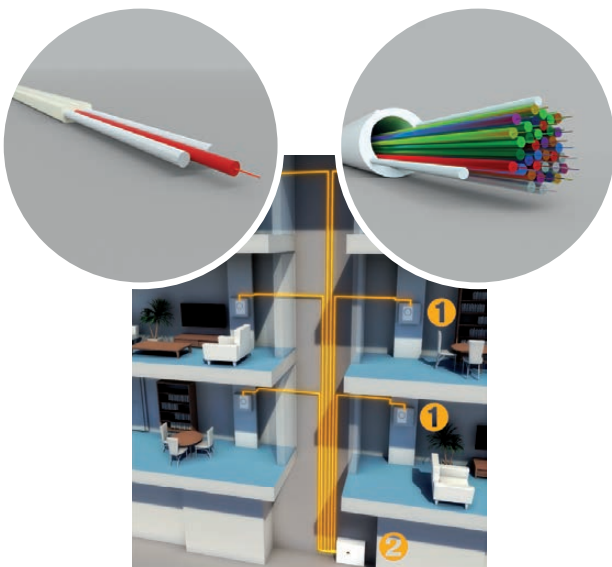
UND series	Indoor rated
1636	Up to 48fo - Cca

SDU: Indoor drop optic cables



UNB series	strippable
1625 - 1627	Up to 4fo

Riser optic cables



COR series	Push/Pull
1821 - 1823 - 1861	Up to 4fo
PAD series	Permanent access
1826 - 1828	Up to 288fo

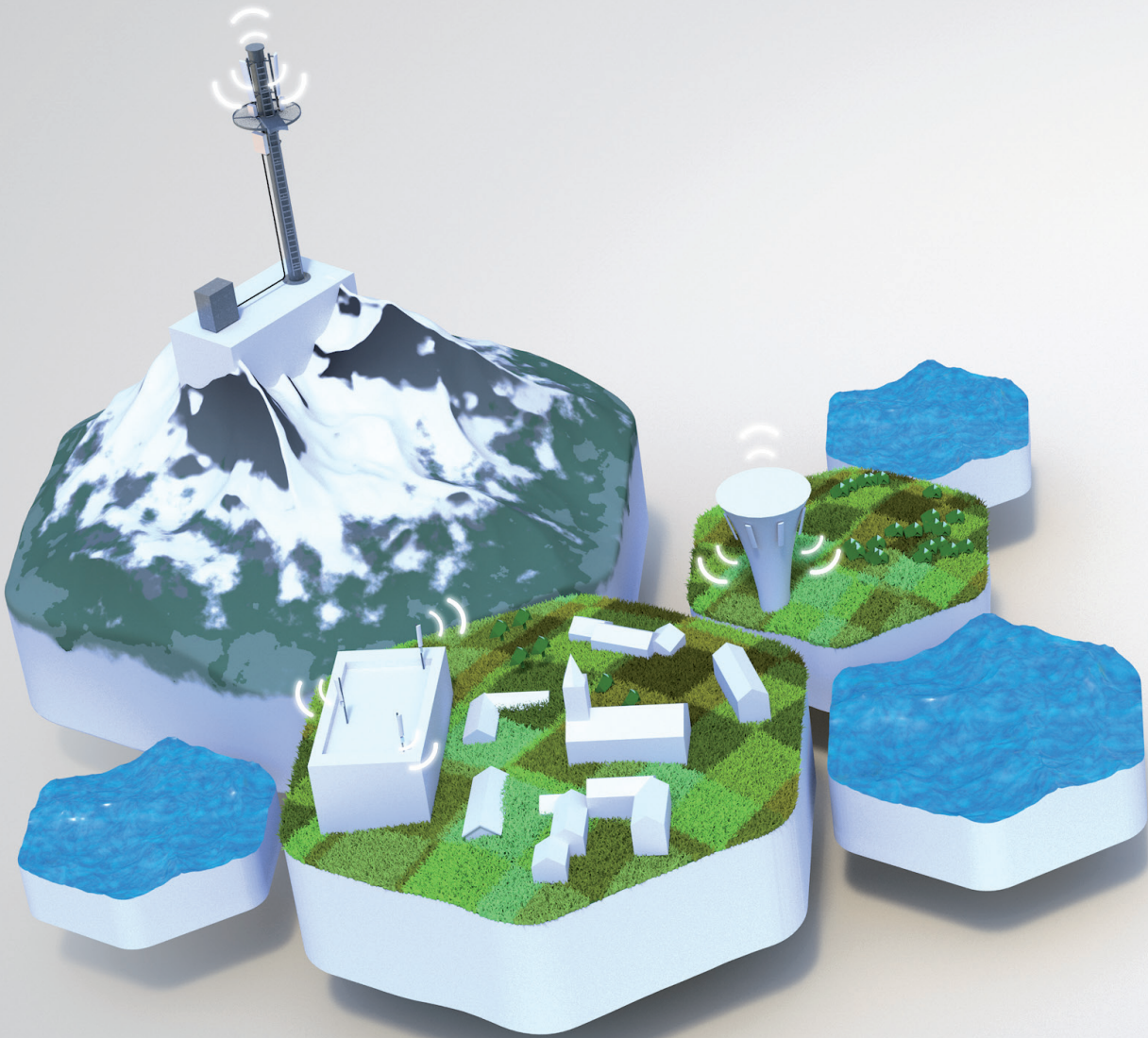
μducts drop optic cables



MCD series	Blowing
1536	Up to 4fo

ACOME Hypercell®

Radio Frequency Solutions



Outdoor

Cellular Telecom Networks
Microwave Cabling Systems
FTTA



Indoor

Indoor DAS
Tunnels and transportation

Fiber to the Antenna Solutions

Distributed Base Station with Radio Remote Unit has significantly simplified the network layout, and reduced CAPEX and OPEX in 3G & 4G networks.

DBS mainly use fiber to connect BBU in the base station cabinet and RRU on the top near Antennas.

FTTA solutions are designed to prepare further network virtualization.

ACOME HYPERCELL® Hybrid FTTA cabling solutions, provide most complete solutions for all distributed base station configurations.

The Distributed Hybrid-Line solution is specially developed for high-density sites (Multiple operators/Multiple applications). This hybrid cabling solutions guarantees sustainability and Total cost of Ownership optimization.

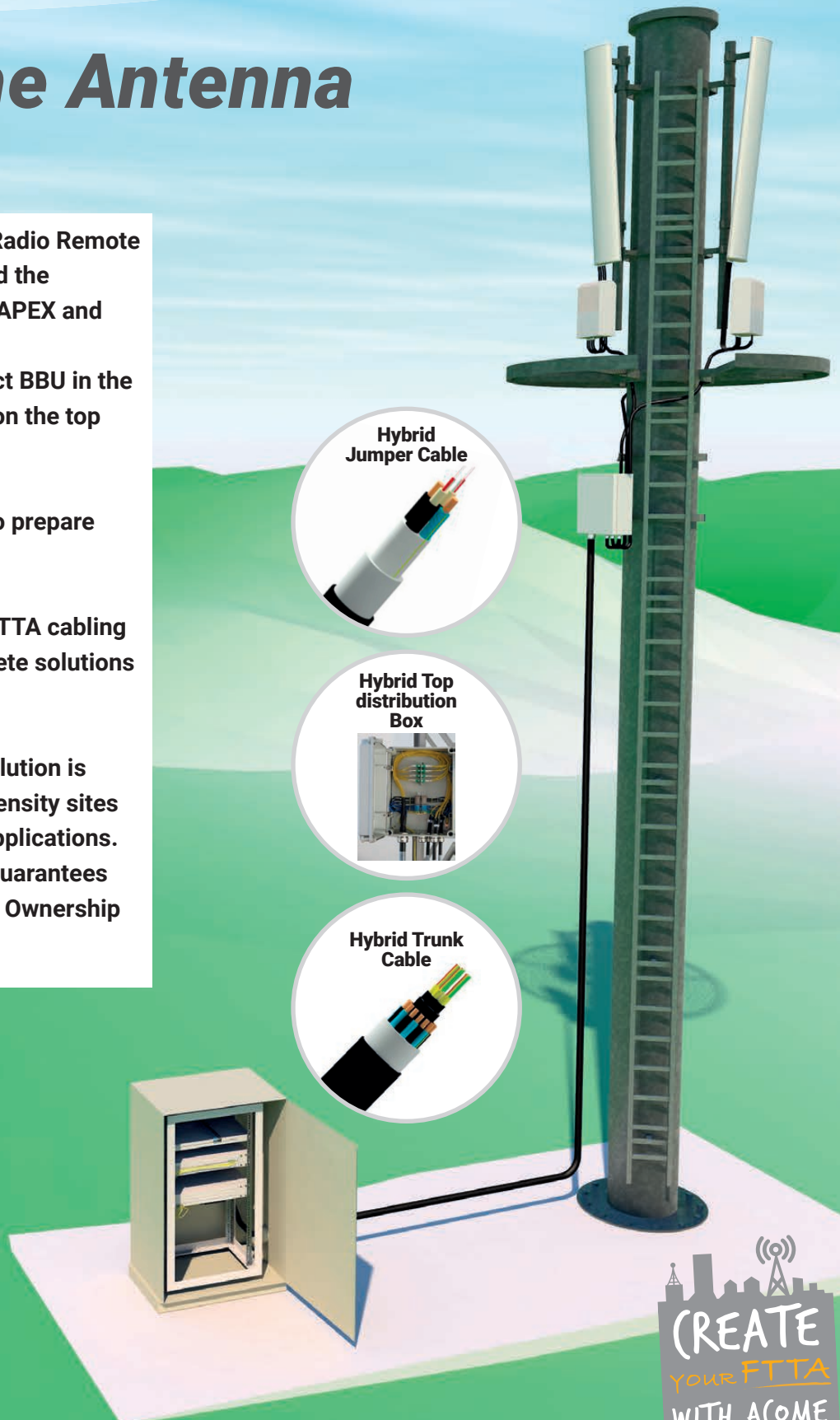
Products

- Hybrid Trunk Cable
- Hybrid Top distribution Box
- Hybrid Jumper Cable



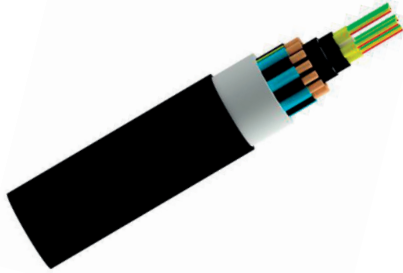
ACOME FTTA Solutions

<https://youtu.be/hKwnMI-3I70>



**(CREATE
YOUR FTTA
WITH ACOME**

Hybrid Trunk Cable



ACOME Hybrid trunk cable is designed for the connection between TJB (top junction box) and BJB (base junction box), or BBU patch panel and PDU (power distribution unit) directly.

Hybrid trunk cable length	Product number
20(-0/+0.5)	C1680A-L20
30(-0/+0.5)	C1680A-L30
40(-0/+0.5)	C1683A-L40
50(-0/+0.5)	C1683A-L50
60(-0/+0.5)	C1686A-L60
70(-0/+0.5)	C1686A-L70
80(-0/+0.5)	C1686A-L80
90(-0/+0.5)	C1686A-L90
100(-0/+0.5)	C1686A-L100

Hybrid Top Distribution Box

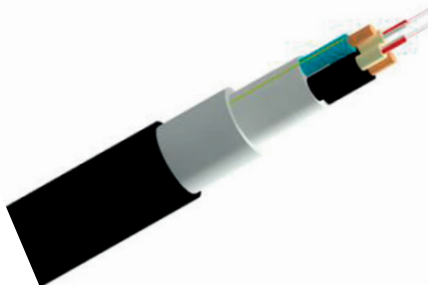


Hybrid Top distribution Box

[C1604A](#)

ACOME hybrid cabling solution is designed for wireless distributed base station. It provides complete cabling solution with optimized installation and cost. Hybrid Top Distribution Box is designed for the junction of power wires and optical fibres between hybrid jumpers and hybrid trunk feeder cable. It is mounted at the top of a tower near RRUs.

Hybrid Jumper Cable



Hybrid jumper cable length	Product number
2(-0/+0.5)	C1707A-L2
5(-0/+0.5)	C1707A-L5

ACOME hybrid jumper cable is designed for the outdoor connection between RRU and top junction box and RRUs.

Outdoor

Cellular Telecom Networks

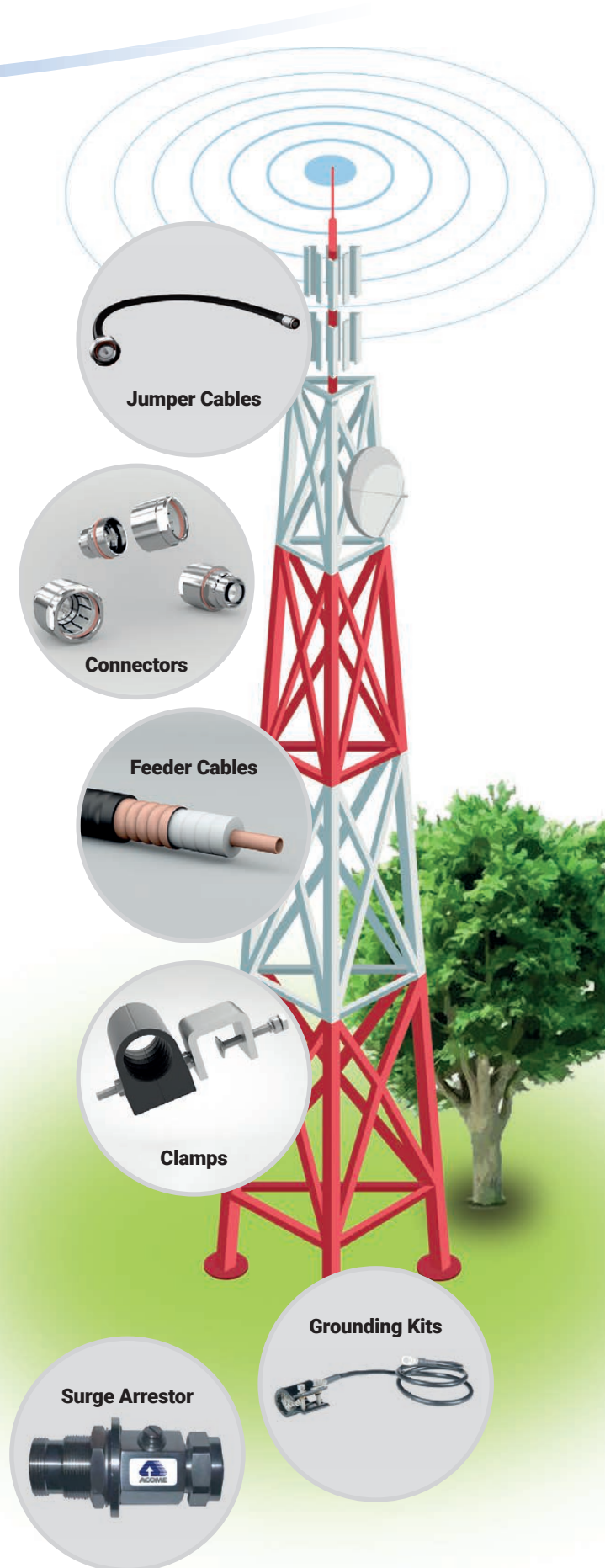
ACOME HYPERCELL® RF Feeder System provides complete product range optimized for future network deployments, including Feeder Cables, Connectors, Jumpers, Grounding Kit, Surge Arrestors, Hangers, Waterproof Kits, etc. While the operators deploys multi-systems sites, sharing the same feeder system is the most direct and economic solution for existing sites.

However this also brings challenges:

- Network coverage performance requests Low Attenuation antenna line.
- Network capacity performances request broadband and Low PIM products.

All these components are designed and manufactured to ensure the best performance of the transmission system in the most severe environment.

- Feeder Cables
- Connectors
- Jumper Cables
- Surge Arrestors
- Grounding Kits
- Clamps
- Waterproofing Kits



Indoor

Indoor Distributed Antenna System

ACOME Hypercell® Indoor DAS solution is a complete broadband and low PIM RF cabling system for in-building environments.

This system has been designed to cover all current wireless application.

It is also compatible with operating multi-application and multi-carriers.



Products

- LSOH cables
- **Leaky cables**
- Connectors
- Jumpers
- Antennas
- Chamber coupler
- **Power Splitter**
- Hybrid Coupler
- Combiner
- **Multiplexer**
- **Attenuator**
- Surge arrestor
- **Terminal Load**



LSOH Cables



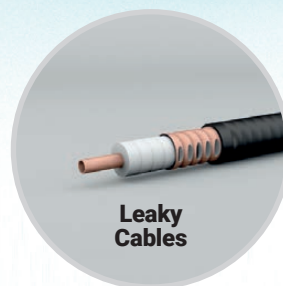
Connectors



Antennas



Jumpers



Leaky Cables



Chamber Coupler



Construction products regulations (CPR) applied to cables

THE NEW EUROPEAN FIRE REACTION CLASSIFICATION


The Euroclass classification defines seven classes based on product fire resistance; Euroclass Fire B2ca is the highest currently applicable to cables. There are also three additional criteria: smoke opacity, flaming droplets/particles and smoke acidity for the higher classes (from B1ca to Dca). The individual Euroclasses and their corresponding criteria are set out below, in decreasing order of severity.








A HIGHER LEVEL OF SAFETY

Before the CPR, only one criterion was applied (generally the spread of flames or fire) with classification levels differing from country to country. The CPR raises the level of safety by applying 9 criteria spread across 5 domains.

Pre-CPR

-  Flame propagation
- ➔ Usually 1 criterion
- ➔ 30 minutes of testing
- ➔ Conducted by the manufacturer

Post-CPR

-  Flame propagation: 2 criteria
-  Heat emission: 3 criteria
-  Flaming droplets: 1 criterion
-  Acidity: 1 criterion
-  Smoke: 2 criteria
- ➔ 9 criteria
- ➔ 1 day of testing
- ➔ Conducted by the certified laboratory

These more comprehensive and longer tests are carried out by an approved laboratory in accordance with 3 compliance certification systems.

System 1+ (Euroclass Fire rating Aca to Cca) is the most demanding, since the approved laboratory also conducts the initial type testing, conducts the initial inspection and has responsibility for monitoring and follow-up testing. It guarantees the highest level of safety.

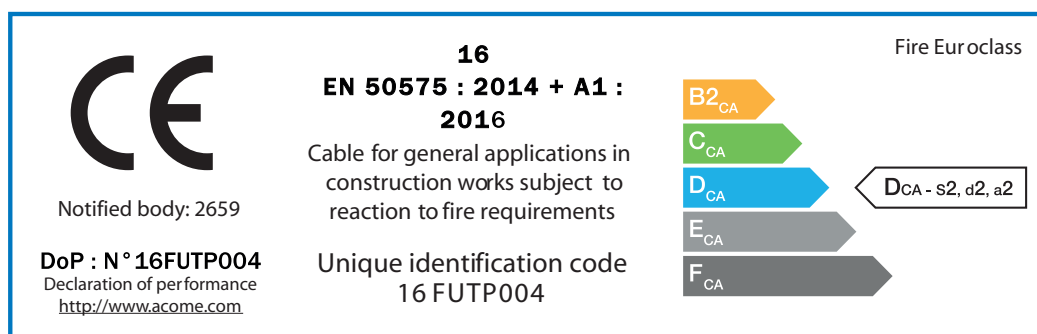
CE Marking and Declaration of Performance

The regulatory obligations applying to manufacturers offering products in the market consist of preparing a Declaration of Performance (DoP) and applying the CE mark.

CE marking

In the context of the CPR, CE marking includes the CE symbol accompanied by other information about the manufacturer and the product. This information is displayed on the packaging label (see template below).

The Euroclass Fire rating is also shown on the marking applied to ACOME copper LAN and optical LAN cables.

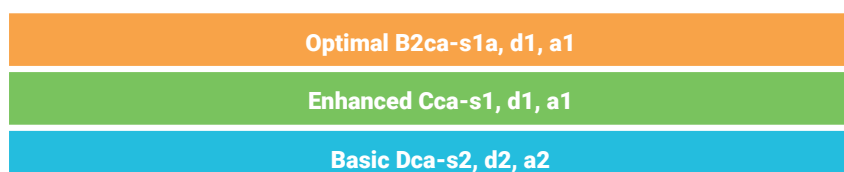


The Declaration of Performance

The DoP is a document in which the manufacturer provides clear identification of a product and details of its performance (relative to the CPR), the contents of which are legally binding. ACOME product DoPs are available from www.acome.com.

New segmentation

The choice of Euroclass Fire depends on local regulations. In the absence of regulation, we recommend the use of three Euroclass Fire ratings below:





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