

# UPSKY™

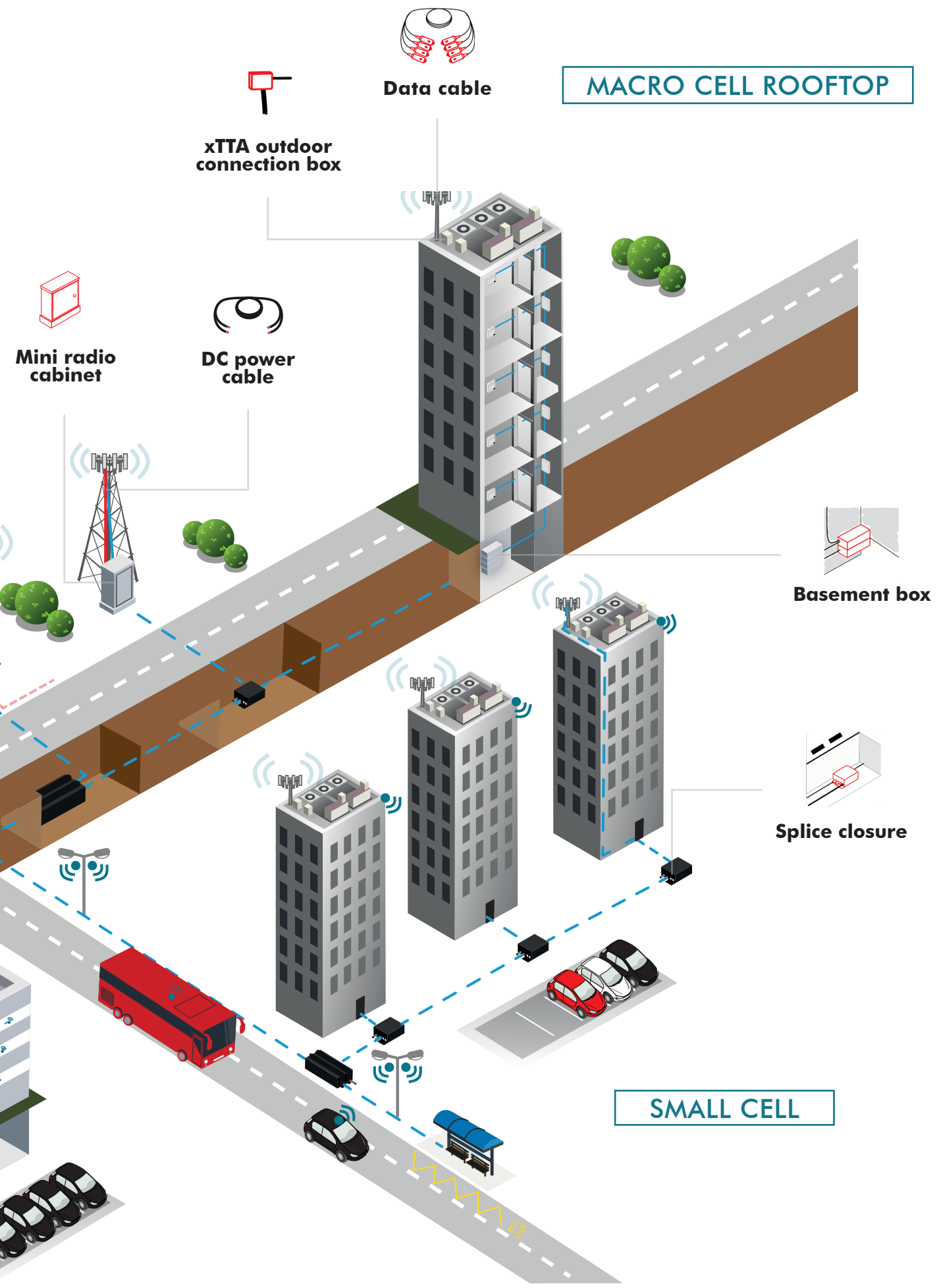
## 4G AND 5G RADIO ACCESS NETWORK SOLUTIONS



 Nexans







**MACRO CELL ROOFTOP**

**SMALL CELL**

**Basement box**

**Splice closure**

**xTTA outdoor connection box**

**Data cable**

**Mini radio cabinet**

**DC power cable**

# MACRO CELL TOWER & ROOFTOP

- Fibre optic, power and hybrid cables for duct and riser installation
- Optimised microwave solution
- Active outdoor cabinet to collect mobile traffic and optimise fixed/mobile convergence
- Combination of fronthaul and backhaul solutions

## FRONTHAUL

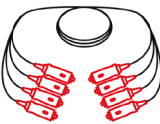


### DC power cable - D-CORE

- Connection between Radio Unit and Base Unit
- D-core shielded cable
- Aluminium foil and tinned copper braid coverage
- Dual conductor versions from 2x4mm<sup>2</sup> up to 2x25mm<sup>2</sup>
- Outdoor and indoor compliance with LSZH jacket, Dca s2d1a1 CPR rating

### DC power cable - TITANEX®

- Connection between Radio Unit and Base Unit
- TITANEX® : Made to survive - according to H07RN-F
- Flexible rubber cable for optimal installation
- Resistance to heavy environmental constraints



### Data cables

- Connection between FTTA box and Base Unit
- Connection between Radio Unit and Base Unit
- Outdoor preterminated fibre optic cable
- From 1 to 150m
- Available with 2, 12 or 24 fibres



### Hybrid cables

- Connection between HTTA box and Base Unit
- Connection between Radio Unit and Base Unit
- Dual or multi-conductors cables
- Up to 48 fibres - Preterminated with LC duplex connectors



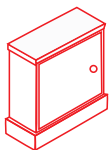
### Microwave cable

- To connect the IDU to the ODU
- Cat.5E and Cat.6A solution with POE
- Fibre solutions



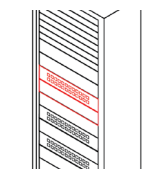
### Outdoor connection box

- Interconnexion between Radio Units and Base Unit
- Fibre or hybrid solution
- With or without circuit breakers
- Designed for 2 cable entries and up to 18 cable exits



### Mini radio cabinet

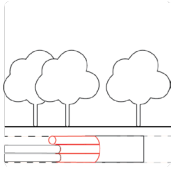
- To convert a radio site currently connected via  $\mu$ wave into a site connected via fibre
- Compact and cost effective solution
- Cooling system, rectifier and batteries designed according to site requirement
- Maintenance and extensions on demand



### Modular subrack

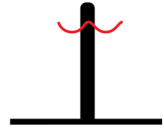
- Termination of fibre optic feeder cable at Base Unit location
- Splicing or patching termination
- Compatibility with singlemode or multimode fibres

## BACKHAUL



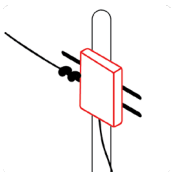
### Underground micro-cables for air blowing installation

- Optimised for blowing in microducts
- Complete range from 2 to 288 fibres
- Large range of designs: central tube, stranded micro-tubes or flexible micromodules adapted to cover all international engineering rules



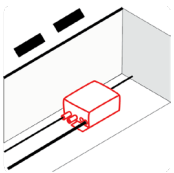
### Aerial cable

- ADSS complete range up to 144 fibres
- Armoured in single or dual sheath
- Fully dielectric construction



### Aerial box - Outdrop 2+

- Optical distribution box for wall or pole mounting
- Up to 72 splices with single fibre management
- Up to 12 drop cables
- Patching version: up to 12 SC adapters



### Splice closure – BLACKBOX

- Ultra compact (2L) and designed for easy multiple openings
- Watertightness IP68
- In-line, midspan or extraction for the main cable with the same product
- Up to 72 splices in G657 fibre - 36 splices in G652.D and 16 secondary cables

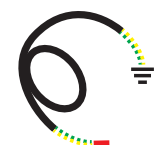
### Splice closure – WTC

- Versatile installation: underground, aerial or directly buried application
- Fully mechanical watertight system IP 68
- High impact resistance IK10
- 3 sizes from 48 to 336 splices
- Up to 6 cable ports depending on the configuration



### AC power cables

- Rigid industrial cables
- Multiple cross sections from 1 to 5 conductors
- Outdoor installation in cables trays, ducts or walls

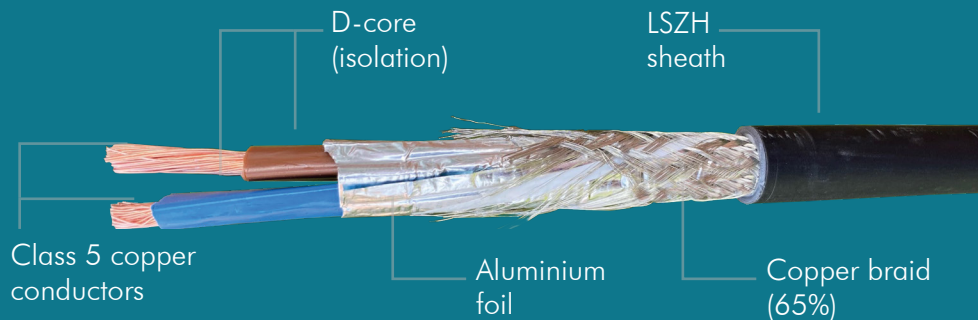


### Earthing cables



# Focus on... DC power cable

Dual copper conductor cable for Base Unit - Radio Unit DC power connection  
 Specific D-core conductors - 2x4mm<sup>2</sup> to 2x25mm<sup>2</sup>  
 Electromagnetic shielding  
 Indoor/outdoor solution



## Making the difference

- European manufacturing
- Easy handling and reduced footprint
- Improved fire propagation properties: Dca Euroclass

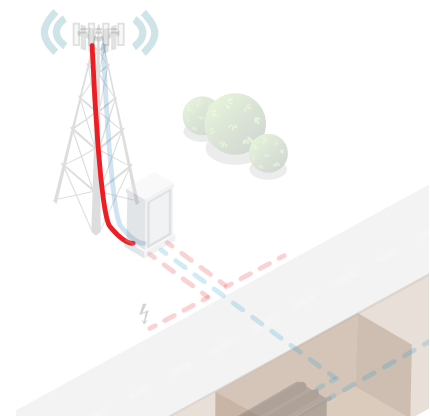
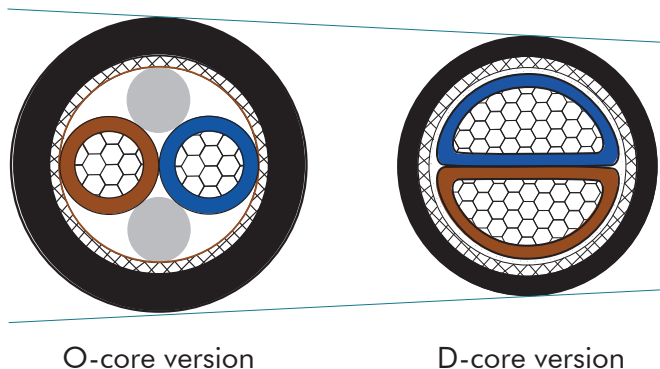
## Easy handling

- Class 5 stranded copper
- Easy stripping - Efforts for stripping isolation sheath divided by 10 compared with O-core version
- Compatibility with power connectors from most connectivity manufacturers
- Deliveries on 1000m or 500m drums

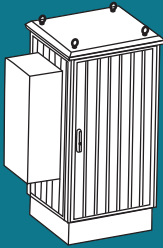
## Optimised footprint

- Reduced cable diameter
- Reduced weight (at least -12%)
- Up to 40% space savings in standard cableways

	O-core cable	D-core cable
2x6mm <sup>2</sup> Diameter	14.0mm	12.0mm
2x6mm <sup>2</sup> Weight	272 kg/k	240 kg/km



# Focus on... Active Cabinet



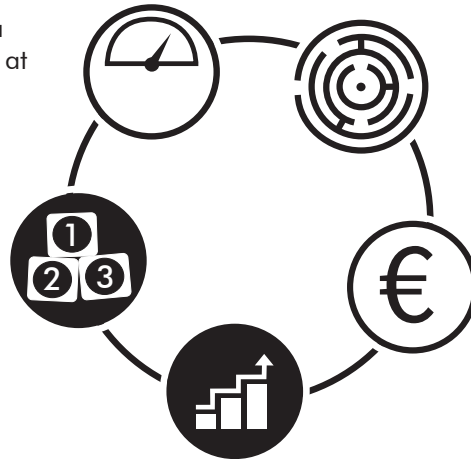
Solutions of single-door or double-door cabinets  
 On-request configurations for management of fixed/mobile convergence  
 Modular and scalable solution  
 Nexans as a one-stop shopping partner

## Fast roll-out

Standard solution built as a «Lego» to reduce lead-time at every step of a deployment project.

## Simplicity

One reference for the base cabinet and 7 options to cover all applications regardless of energy consumption, redundancy level etc. A simple design and roll-out.



## Standardisation

Base cabinet and all options are referenced. All sites use identical equipment even with different configurations.

## CapEx/OpEx optimisation

A solution optimising CapEx by using standardised solutions. Progressive roll-out and simplified maintenance.

## Evolvitivity

Possible upgrades to anticipate the evolution of telecommunication networks with standard products.



ODF kit



Battery



Rectifier kit



Cabling accessories



AC kit

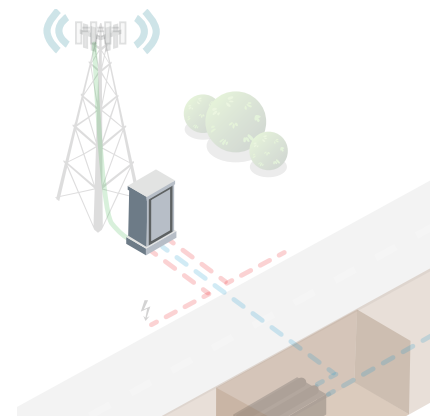


Air extraction kit



Extension kit

Active cabinets are an easy way to solve growing mobile data traffic issue. They consist in an easy-to-install solution for allowing data processing in remote areas. They can be a fast-to-deploy low-capacity Central Office connected to the fixed metropolitan network. It is a flexible solution to ensure the convergence of radio and fixed infrastructure (Radio cabinets, WDM cabinets...).



## DEDICATED SERVICES FOR TELECOM OPERATORS AND INSTALLERS

Building upon decades of experience in cabling, supply chain and engineering, Nexans offers its customers innovative services and digital solutions aimed at contributing to your operational and financial performance.



### ENGINEERING AND TRAININGS

- In-depth training for installation and maintenance teams
- Integration of active equipment and power systems inside outdoor cabinets
- Delivery to site of preconfigured and integrated solution for a reliable, fast and cost effective deployment



### ADVANCED LOGISTICS

The end-to-end cable logistics solution for traceability and full view on stock location, and availability

- On-time execution with just-in-time delivery
- Project site congestion reduction
- Budget control
- Securitisation of materials and equipments until the last minute



### SMART INVENTORY MANAGEMENT

Based on RFID technology and demand driven supply models to easily monitor your stocks

- Real-time stock visibility
- Stock consumption follow-up in real time
- Quick reception process
- Fast and easy physical stock counting



### CONNECTED DRUMS

Drum tracking & geolocation

- Automatic delivery notification
- Cable theft detection
- Residual length management
- Full fleet geolocation

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