

Mira ORCA ONU

Fiber connectivity for hard-to-access locations

Addressing the fiber deployment challenge

Industry focus has changed from measuring homes passed, to homes connected. As a result, issues with traditional deployment models have been identified, such as drop cable replacements and internal cable upgrades.

FTTH installation works bring practical difficulties and prohibitive costs. These create bottlenecks in fiber adoption that threaten to impede transition to next-generation connectivity.

The mounting costs of traditional installation

Several issues significantly increase the Cost Per Premises (CPP) in current fiber deployments:

Civil engineering and construction

Blocked or congested ducts command expensive remediation, including specialized labor, skills, and tooling that increase costs. For installations involving specialist surfaces, reinstatement costs alone can render projects economically unfeasible.

Wayleaves

Legal and logistical obstacles around securing permission to access private property – eg digs at single-dwelling units (SDUs) or running new trunking and cables in multi-dwelling buildings (MDUs) - can delay projects and increase expenses.

Aesthetic concerns

Concerns about the visual impact of new infrastructure alongside existing legacy systems (particularly in areas served by multiple operators) introduces additional complexity.

Market timing pressures

Project delays can defeat the first-to-market advantage, directly impacting business outcomes, and failed installations that require re-visits harm customer experience and brand perception. For MDUs, the need for specialist planning and negotiation can delay deployment by months.

HFC switch-off complexity

Existing customers remain dependent on legacy infrastructure until migration. Dependencies on power, outside plant infrastructure, headend equipment, specialized skills, and tooling must be carefully managed during transition periods.

Transforming fiber development

Technetix Mira ORCA is a groundbreaking remote XGS-PON optical network unit (ONU), developed to use existing customer premise coax or fiber cabling to deliver multigigabit fiber services.



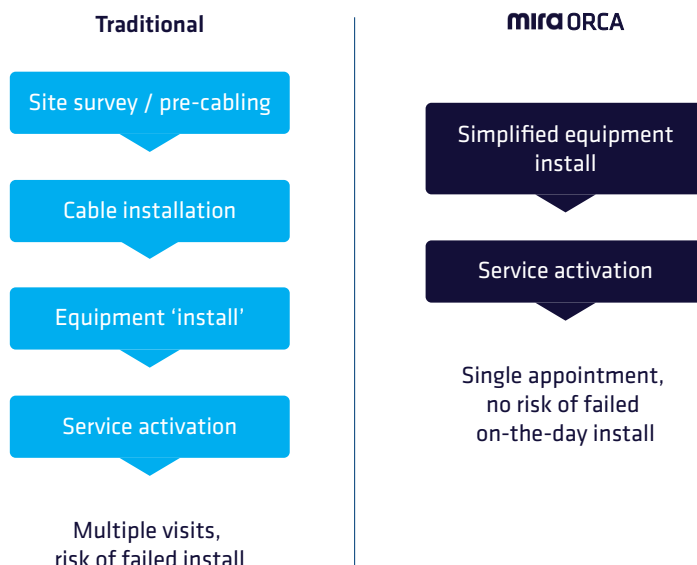
Key Benefits:

- Enables connectivity in impossible locations - Fast fiber service where new cable installation is impractical
- Zero-disruption deployment - Hours instead of days, no drilling or property modifications
- Leverages existing infrastructure - Uses coaxial/copper for multigigabit service
- Significant cost reduction - Eliminates civil works, permissions, and extensive labor
- Simplifies complex scenarios - Mitigates MDU planning requirements and extends digital inclusion

KEY BENEFITS OF THE TECHNETIX MIRA ORCA ONU

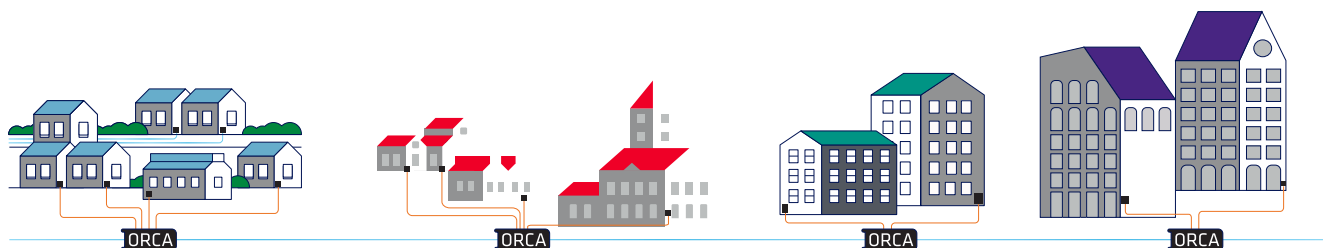
Time-saving

Technicians can connect more customers with less effort through streamlined workflow and reduced site visits. ORCA eliminates time-consuming rewiring processes for faster deployment and immediate service activation. Compared to previous installation method, works take a fraction of the time.



Ideal for challenging deployments

Scenarios involving dense urban areas, or historic buildings present criteria such as construction disruption limitations or preservation restrictions. Furthermore, MDUs can present complex internal wiring systems. To remove these types of customer adoption barriers, the ORCA ONU adapts to the scenario in place of forcing environments to adapt to traditional fiber deployment methods.



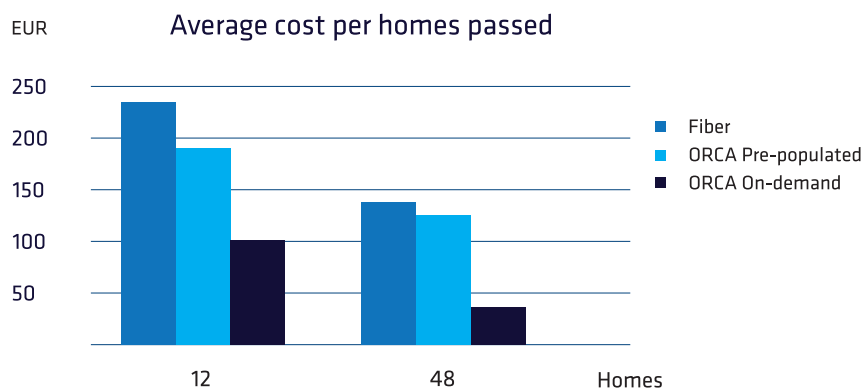
The sustainable path to next-generation broadband

The Technetix Mira ORCA offers a new approach to fiber deployment, harmonizing technological advancement and responsible raw materials management. The solution reduces resource consumption, waste generation, and emissions from cable manufacture and site visits, and lowers overall energy consumption through faster transition time from legacy to PON infrastructure.

KEY BENEFITS OF THE TECHNETIX MIRA ORCA ONU

Economic advantages

ORCA's use of legacy customer premises cabling minimizes costs for new materials, and its simplified installation processes reduce labor hours. This provides substantial cost savings on each deployment, optimizing ROI as customer onboarding accelerates. Furthermore, ORCA's symmetrical throughput of up to 2.5 Gbps is offered with a 10 Gbps-capable pathway to ensure immediate economic benefits and futureproof performance.

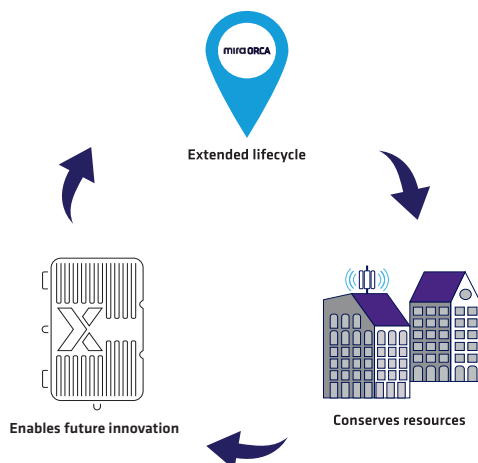


Key Benefits:

- ORCA saving vs fiber: €100 per home passed (on-demand model)
- ORCA saving vs fiber: €12 per home passed (pre-populated model)
- ORCA serves XGS-PON when running fiber not possible

Maximized assets

Maximizing the value of existing coaxial and copper investments conserves valuable resources and extends the lifecycle of previously installed infrastructure. Drop cable re-use reduces raw material consumption and helps promote digital inclusion with fiber services access in areas where expense or disruption would deter traditional deployment. The future-ready design ensures that today's sustainability decisions continue to deliver environmental benefits as technology evolves.



KEY BENEFITS OF THE TECHNETIX MIRA ORCA ONU

Logistical efficiency

ORCA's highly efficient logistical profile extends throughout the supply chain. A reduced reliance on new cabling significantly decreases storage requirements, with fewer components simplifying inventory management. Crucially, eliminating hazardous re-cabling tasks in confined spaces, attics, and other challenging environments not only speeds up deployment; it enhances worker safety.



Reduced waste and disruption

Engineered for minimal disruption by eliminating digging and drilling requirements from the installation process, the ORCA solution significantly reduces construction debris, and redundant copper and coaxial cable destined for landfill. In combination with waste reduction, fewer truck rolls and faster transition times from legacy to PON infrastructure improve operational efficiency and reduce interruption.



Waste reduction



Reduces emissions



Energy saving

KEY BENEFITS OF THE TECHNETIX MIRA ORCA ONU

Safety benefits

Employing existing coaxial or copper cabling enhances safety by eliminating digging, drilling, re-cabling in confined spaces, and other hazardous installation tasks. For MDUs, historic buildings or equally complex environments, ORCA's single-visit deployment model minimizes technician exposure and on-site disruption. Using legacy cabling lowers environmental and occupational health risks, while streamlined logistics and reduced vehicle use contribute to safer urban operations. Altogether, ORCA supports a more secure, efficient, and future-ready fiber rollout.

Key Benefits:

- Elimination of hazardous installation tasks
- Minimized on-site presence
- Lower environmental and health risks
- Future-proof design with safety in mind



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