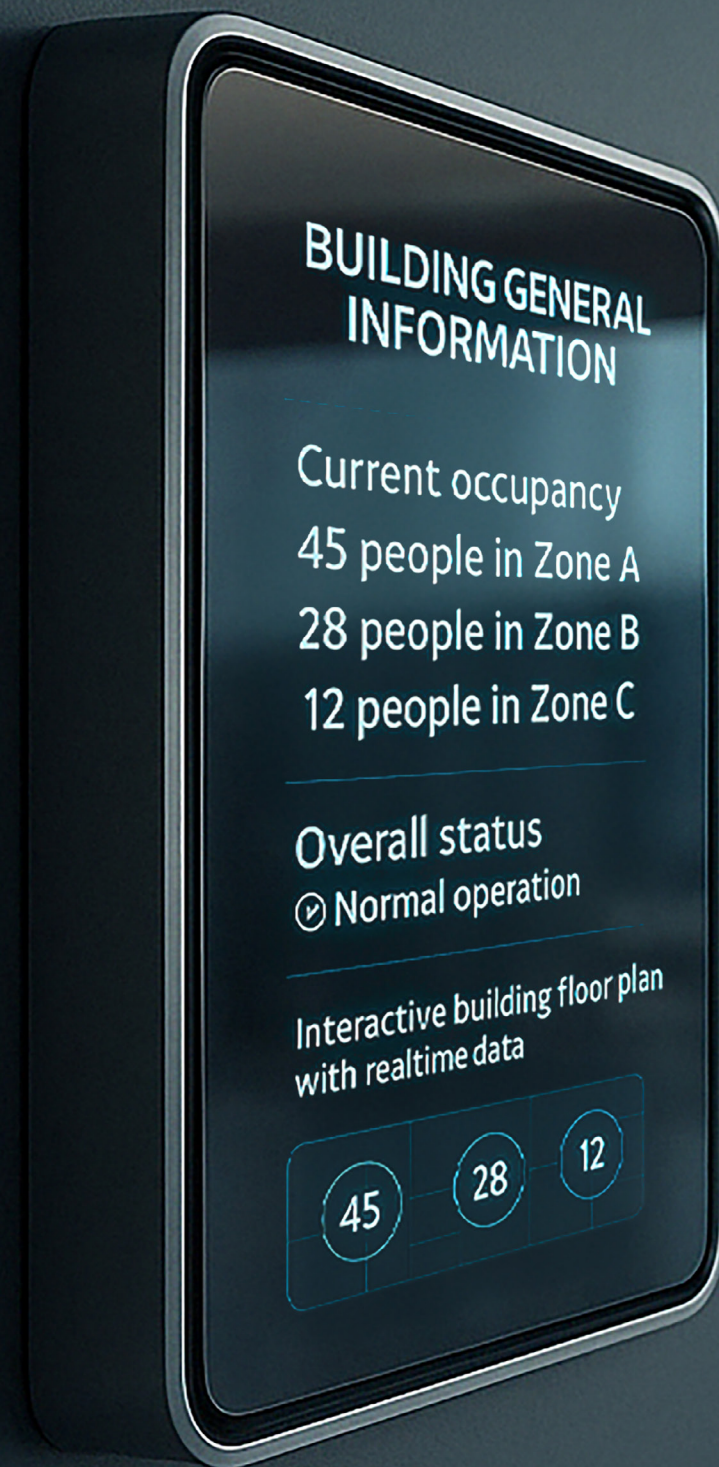




Smart
Buildings

barpa



A **Smart Building**, or Intelligent Building, is a structure that uses technology to enhance operational efficiency, security, and occupant comfort. These buildings integrate various automation systems, sensors, and devices connected through the Internet of Things (IoT), allowing centralized control and optimized use of resources such as energy, HVAC, security, and telecommunications.

What is a **Smart Building?**

IP Convergence plays a fundamental role in smart buildings, as it enables the unification of multiple network systems — from data and voice to access control and surveillance. Thus, devices such as cameras, Access Points, Sensors, and Smart LED lighting systems can be managed in an integrated way.



Growth of Smart Buildings

The global smart building market has experienced accelerated growth.

This sector is expected to exceed \$150 billion by 2028, with a compound annual growth rate (CAGR) of around 11%.

In Portugal and Spain, the market is also growing significantly, driven by the need for energy efficiency and automation.

Key factors driving this growth

Energy Efficiency

Operational cost reduction by optimizing energy usage. Studies show smart buildings can cut energy consumption by up to 30%.

Sustainability

Adoption of eco-friendly practices and certifications like LEED and BREEAM.

Security and Connectivity

Implementation of cybersecurity solutions and high-speed infrastructures.

Growing adoption of IoT and AI

Smart sensors for HVAC, security, and space management.

Challenges

IT Managers in Smart Buildings

IT managers face a range of challenges when implementing and maintaining the infrastructure of smart buildings.



PoE (Power over Ethernet) Management

Implementing efficient power delivery for devices such as sensors, WLAN antennas, and cameras without compromising network security and performance.



System Interoperability

Ensuring that devices from different manufacturers can communicate in an integrated and seamless manner.



Network and IoT Security

Protection against cyberattacks and vulnerabilities in connected devices.



Scalability and Flexibility

Network infrastructure ready for future growth without performance loss.



Remote Management and Automation

The need for centralized platforms to efficiently monitor and manage all connected devices.

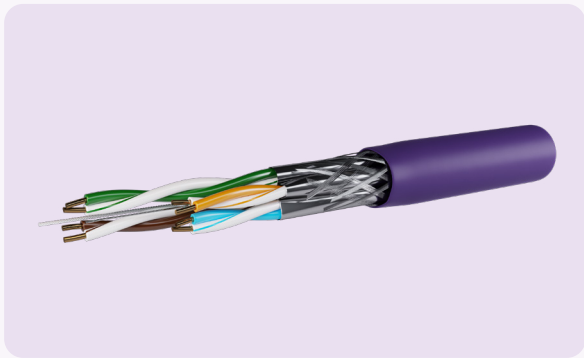


Compliance with environmental and security certifications

Adherence to international standards such as LEED and ISO 14001.

barpa Solutions for Smart Buildings

barpa offers passive infrastructure solutions to support the critical needs of smart buildings. The comprehensive portfolio includes:



Copper Cabling Solutions for PoE

barpa provides Cat6 and higher-grade copper cabling, ideal for a wide range of applications requiring PoE.

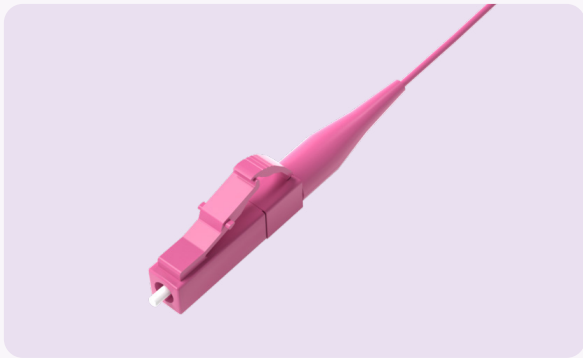
- ✓ With PoE support up to 100W, it ensures safe power delivery to critical devices such as security cameras, access points, and more.
- ✓ Independent lab certification (Cat6A U/FTP 700MHz) guarantees high performance even in environments with heavy data traffic.
- ✓ Multiple shielding options (U/FTP, S/FTP) help reduce electromagnetic interference—essential for installations near sensitive electronic equipment.



Energy Efficiency and Sustainability CPR Cca and B2ca Cables

Safety and energy efficiency are essential pillars for modern business buildings.

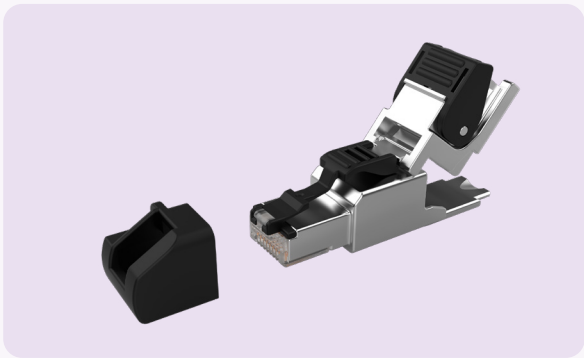
- ✓ Low fire propagation and minimal emission of smoke and toxic gases (LSZH) ensure a safer and more sustainable environment.
- ✓ Reduced electrical resistance helps minimize power losses, optimizing the performance of PoE systems.



OM4 and OS2 Fiber Optic Solutions for Vertical Distribution

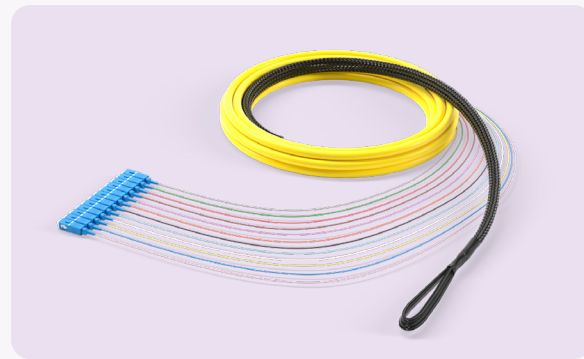
Engineered to serve as high-speed backbones, these solutions ensure efficient interconnection between buildings and mission-critical areas.

- ✓ Supports 10G, 40G, and 100G networks, delivering low latency and high performance.
- ✓ Immunity to electromagnetic interference (EMI) and low signal attenuation enable long-distance transmissions without compromising signal quality.



Direct Attach Solution

The growing number of IoT devices has created the need for Direct Attach solutions. barpa introduces Lyra, a solution that connects directly to the cable, delivering both data and power seamlessly.



Pre-Assembled Fiber Optic and Copper Solutions

To accelerate deployment, barpa offers pre-assembled solutions that ensure speed and precision during installation.

- ✓ Installation time reduction – Up to 60% faster, minimizing errors and lowering both CAPEX and OPEX.
- ✓ High-quality manufacturing eliminates on-site issues, ensuring a robust and reliable network infrastructure.



Rack Solutions for Data Centers and Technical Rooms

Our cabinets and racks are designed to organize, ventilate, and protect critical equipment, adapting to a wide range of environments.

- ✓ Multiple formats – From floor-standing to wall-mounted racks, with various load capacities ranging from 800 kg to 1500 kg.
- ✓ Optimized thermal management reduces the risk of overheating and ensures operational efficiency.



Easy Installation and Maintenance Reduced CAPEX and OPEX

With innovations such as screwless fiber optic adapters and tool-less RJ45 modules, barpa ensures a fast, hassle-free installation process.

- ✓ Possibility to redo connections in case of error, promoting greater efficiency and waste reduction.



MPO/MTP - Efficiency and Speed in Expanding Enterprise Networks

Ideal for data centers and high-density environments, our MPO/MTP connectors allow simultaneous termination of multiple fibers, accelerating deployment and simplifying future expansions.

- ✓ Up to 90% faster installation and fewer failure points, increasing overall network reliability.

Benefits of choosing barpa

Working with barpa means:

Certified and Future-Ready Solutions

Robust and scalable infrastructures, built to meet the demands of today's market and tomorrow's challenges.

Secure, Efficient, and Sustainable Networks

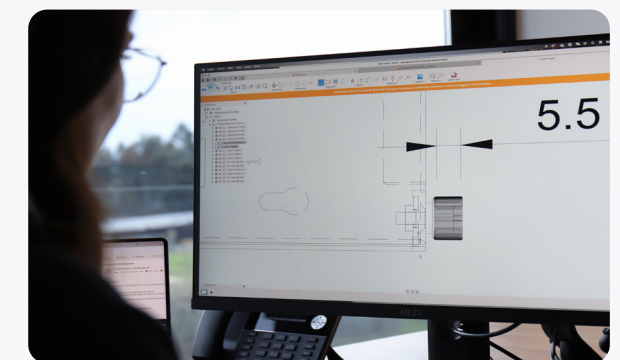
Advanced protection against cyberattacks and optimized energy resource management.

Fast Installation and Reduced Operational Costs

Agile processes that minimize downtime and maximize efficiency.

Specialized Technical Support

An experienced team ready to develop custom projects and solve specific challenges.



Custom Solution Development

Our Research & Development (R&D) team is equipped to understand the specific needs of each project, designing tailor-made solutions that ensure maximum performance and scalability.

Ready to move forward?

Schedule a meeting with our sales team and discover how we can optimize the connectivity and efficiency of your business building!

✉ info@barpa.eu
🌐 www.barpa.eu

barpa is a company specialized in highperformance connectivity infrastructures, delivering **fiber optic and structured cabling solutions across multiple sectors, including healthcare, hospitality, industry, commercial buildings, data centers, smart buildings, and more.** With a strong commitment to proximity, quality, and innovation, barpa provides resilient and secure infrastructures that ensure uninterrupted connectivity for a wide range of applications.

Our purpose is clear:
Unite humanity through telecommunications across generations and to become one of the most influential companies in the sector globally.

As a brand of the Argon Group, active in the market since 2001, we demonstrate sustainable growth, backed by multiple certifications and awards in management, environmental, and financial areas.



What Sets Us Apart

At **barpa**, we believe that the combination of experience, innovation, and closeness to our clients is what makes us a trusted partner for structured cabling infrastructure. Our commitment to quality, customization, and sustainability is reflected in everything we do, delivering high-performance solutions for the most demanding sectors.

MARKET REPUTATION

barpa has earned a strong and trustworthy market position, recognized for its quality, reliability, and commitment to clients. Our industry experience allows us to deliver solutions that meet and exceed market expectations.

R&D AND INNOVATION FOCUS

Our Research and Development (R&D) team constantly works on creating next-generation technology solutions, ensuring our products meet the demands of an ever-evolving market.

CLIENT PROXIMITY

We value partnership relationships and continuous support. Our team is always available to understand challenges, propose tailored solutions, and provide the best support before, during, and after each project.

SUSTAINABILITY AND EFFICIENCY

We are committed to ecological and efficient solutions, reducing waste and optimizing resource use. This is proven by our ESG Committee and internal Turn Green initiatives.

TECHNICAL EXPERTISE AND CUSTOMIZATION

We have a highly specialized team and flexible processes that allow us to develop and produce solutions tailored to each client's needs. We don't just deliver products; we provide solutions adapted to each infrastructure.

MOTIVATED AND PROACTIVE TEAMS

barpa's success is driven by our highly motivated teams, focused on excellence and client proximity. We value a culture of proactivity and continuous improvement in pursuit of our mission.



Support and Partnerships

Production



At barpa, we believe that production with quality and cost efficiency are key to success.

That's why we guarantee excellence standards in all our solutions, from the development phase through to final production.

We rely on a global production network, through strategic partnerships in several parts of the world, ensuring the best technology, efficiency, and scalability to meet sector demands.

All production is rigorously controlled by our team, ensuring certified quality, compliance with international standards, and total product reliability.

With this approach, we develop innovative, competitive, and adaptable solutions aligned with the highest technical and safety requirements.

Logistics



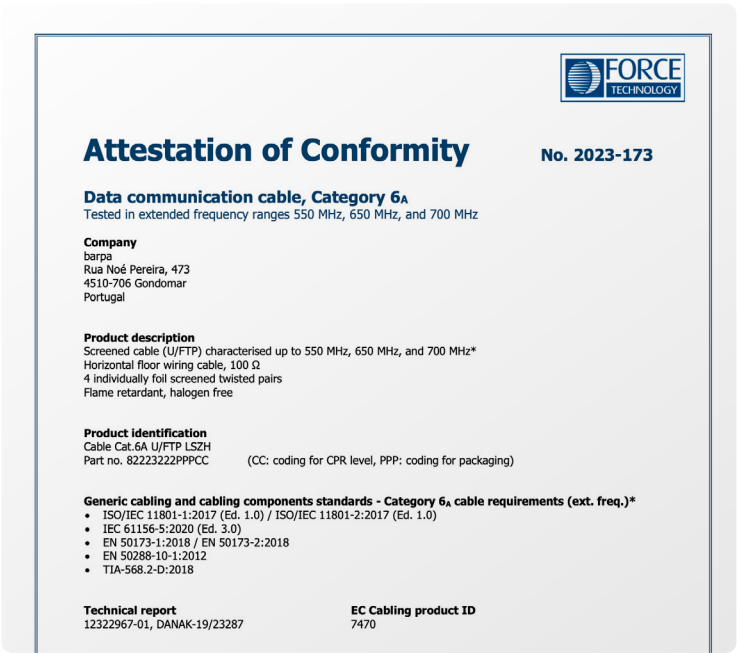
At barpa, we know that logistics efficiency is essential to ensure that infrastructures have access to the best connectivity solutions without delay.

Our distribution center in Portugal allows us to manage orders efficiently and ensure rapid deliveries worldwide. Our team closely follows the entire logistics process, from dispatch to final delivery, ensuring transparency, predictability, and continuous support.

We work with strategic logistics partners to deliver flexible solutions tailored to client needs.

With barpa, you can count on fast order management, continuous tracking, and dedicated support—ensuring your projects never stall due to material shortages.

Quality



At barpa, quality is the foundation of everything we do.

From development to production and delivery, we ensure each solution meets the highest technical and reliability standards.

Each product undergoes rigorous quality control processes, ensuring performance, durability, and compliance with international standards.

Our client-centric focus allows us to deliver customized solutions that build confidence and satisfaction in every project.

With barpa, our clients know they can rely on certified, reliable solutions ready to meet infrastructure challenges.

Our commitment to excellence is reflected in customer satisfaction, with an NPS (Net Promoter Score) rating of 9.4.

25-Year Warranty Program



OFFICIAL INTEGRATOR

At barpa, we believe in the quality, reliability, and durability of our structured cabling solutions. That's why we offer an exclusive 25-Year Warranty Program for certified barpa integrators, ensuring maximum security and performance of installed infrastructures.

- By joining the program, integrators gain access to:
- ✓ Full 25-year coverage on the performance and certified solution components.
 - ✓ Compliance assurance with international standards and guaranteed performance for future applications.
 - ✓ Specialized technical support for project implementation and infrastructure certification.
 - ✓ Market differentiation, offering end clients a validated and long-lasting installation.

barpa works in partnership with integrators to ensure each project is delivered with certified quality, providing reliability and added value for clients in the most demanding sectors.

Want to become a Certified barpa Integrator and offer 25 years of warranty on your installations?

Get in touch with us and discover all the advantages of the program!

barpa

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