Healthcare Sector

barpa

The **Healthcare Sector** is one of the fundamental pillars of modern society, playing a key role in quality of life, population well-being, and socioeconomic development. Hospitals, clinics, and medical centers are responsible for delivering critical and continuous care, supporting everything from emergency procedures to preventive care and chronic disease management.

Healthcare Sector and Hospital Infrastructure

The Importance of the **Healthcare Sector** in the Economy and Society

10%
Global GDP
The healthcare sector accounts for around 10% of the global GDP, according to the World Health Organization (WHO).

1,5 **trillion euros**

In European Union countries, healthcare spending exceeds €1.5 trillion, making it one of the sectors with the highest public and private investment.

It is estimated that by 2030, the population over 60 will double, **significantly increasing the demand** for modern and efficient healthcare infrastructures.

Global Challenges in the **Healthcare Sector**

Despite technological advances, hospital management faces complex challenges that demand constant innovation. The main obstacles include:

Increasing Pressure on Healthcare Infrastructure
Growing patient numbers, staff shortages, and the need to expand hospital capacity.

Digitalization and Connectivity
Hospital systems must be interconnected to improve operational efficiency and patient experience.

Data Security and Protection
As clinical records go digital, concerns about cybersecurity and regulatory compliance grow.

Energy Efficiency and Sustainability
Hospitals are among the biggest consumers of energy and resources, requiring more ecological and intelligent solutions.

Adoption of Emerging Technologies
The Internet of Medical Things (IoMT), Artificial Intelligence (AI), and Telemedicine are redefining healthcare and require resilient infrastructure ready for the future.

Hospital Sector and the
Need for Modern Infrastructure

The Challenges Faced by Healthcare Institutions that barpa is Committed to Addressing:

Growing data volumes

Electronic Health Records (EHRs), medical imaging, and video conferencing demand **extremely high bandwidth and low latency.**

System interoperability

Connecting medical devices, applications, and sensors requires a **robust and flexible network infrastructure.**

Security and compliance

Cybersecurity is a critical concern, with increasingly strict regulations to protect patient data.

Scalability and adaptability

Infrastructure must be ready for new technologies and able to support updates without major operational disruptions.

According to the Ponemon Institute, with the average cost of **downtime** in healthcare exceeding **€8,662 per minute**, ensuring reliable connectivity has become a critical priority for hospital IT Directors.

barpa delivers solutions that

SUPPORT 24/7 AVAILABILITY

ENSURE HIGH PERFORMANCE AND LOW LATENCY

Technologies like PACS (Medical Imaging), telemedicine, and EHRs require high bandwidth networks (>10Gbps) and ultra-low latency (<1ms).
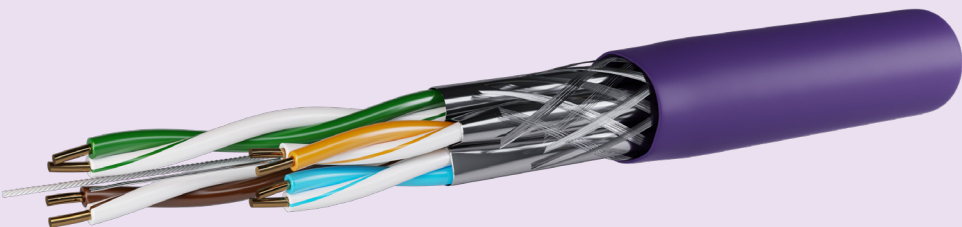
ENHANCE SECURITY AND COMPLIANCE

Protecting clinical data from cyberattacks and unauthorized access is vital.

COMBAT ELECTROMAGNETIC INTERFERENCE (EMC)

Medical imaging equipment emits strong electromagnetic fields that may disrupt data transmission over network cables.

Why Choose barpa in the **Healthcare Sector?**

barpa provides a comprehensive ecosystem of structured cabling solutions, ensuring high performance, safety, and energy efficiency for both public and private healthcare infrastructures. Our solutions to meet the demands of the hospital environment, **ensuring low latency, high reliability, and scalability to support connected medical devices, monitoring systems, and critical applications.**

Copper Cabling Solutions for **Distribution and Backbone**

barpa provides Cat6A and above copper cabling solutions, ideal for supporting high-bandwidth applications such as PACS (Picture Archiving and Communication Systems), hospital VoIP, and patient monitoring systems.

☑ Independent Laboratory Certification – Cat6A U/FTP 700MHz Delivers bandwidth beyond the Cat6A minimum specification (500MHz), ensuring greater stability and efficiency even in high-traffic environments such as hospitals and laboratories.
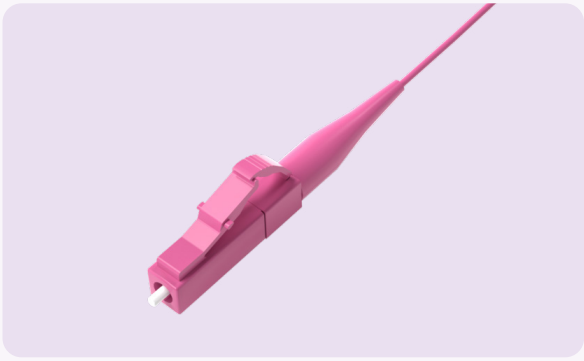
☑ Multiple Shielding Options (U/FTP, S/FTP) – Reduces electromagnetic interference (Alien Crosstalk), which is essential in medical infrastructures housing sensitive equipment.

☑ Category 6A, 7, 7A, and 8 – Ready to meet any challenge.

☑ IEEE 802.3bt (PoE++) Type 4 Compatibility – Supports PoE up to 100W, ensuring safe power delivery to critical devices such as:

• Patient Monitoring Cameras
• Medical IoT Sensors and Smart Devices
• High-Density Hospital Wi-Fi Access Points

Energy Efficiency and Sustainability
CPR Cca and B2ca Cables

Safety and energy efficiency are fundamental pillars in selecting cabling for healthcare infrastructures, where fire protection and energy consumption are critical concerns.
barpa offers CPR Cca and B2ca-rated cables, ensuring maximum protection, compliance with European standards, and environmental sustainability.
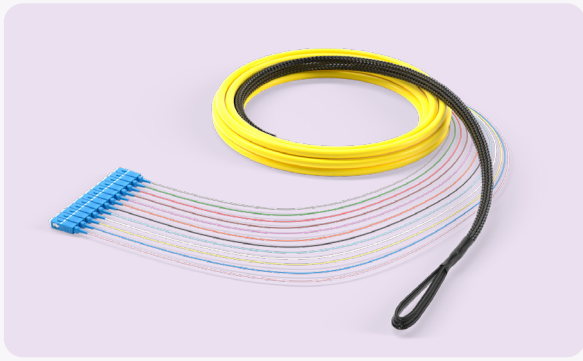
☑ Low Flame Propagation – Limits the spread of flames, protecting patients and healthcare professionals.

☑ Low Smoke and Toxic Gas Emission (LSZH – Low Smoke Zero Halogen) – Reduces the risk of inhaling toxic fumes in the event of a fire, essential for technical rooms and sensitive hospital areas.

☑ Higher Energy Efficiency – Lower electrical resistance reduces power loss and optimizes PoE (Power over Ethernet) performance.

OM4 and OS2 Fiber Optic Solutions for Vertical Distribution

Optimized performance for hospital backbones and inter-building connectivity.

☑ OM4 and OS2 solutions support horizontal and vertical distribution (backbone), as well as inter-building links.

☑ Supports 10G, 40G, and 100G networks, ensuring low latency and high-speed performance.

☑ Optimized for Artificial Intelligence and Big Data applications in healthcare environments.

☑ Electromagnetic interference (EMI) immunity – Essential in hospital settings with high concentrations of electronic equipment.

☑ Low signal attenuation – Enables longdistance transmissions without loss of quality.

Pre-Assembled Fiber Optic and Copper Solutions

To increase installation efficiency, barpa offers pre-assembled fiber optic and copper solutions, ensuring speed and precision in the deployment of IT infrastructure in hospitals, clinics, and laboratories.
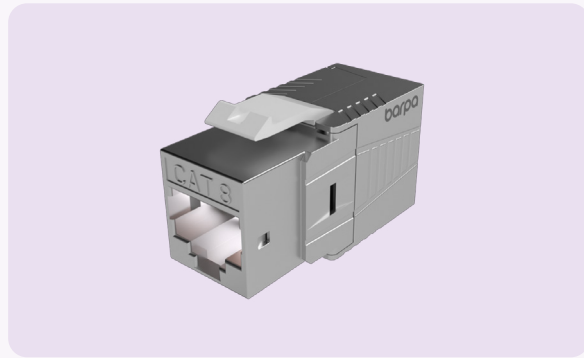
☑ Reduced installation time – Up to 60% faster. Pre-terminated cables, pre-assembled panels, and enclosures help minimize errors and construction time (CAPEX), as well as long-term maintenance efforts (OPEX).

☑ Minimized quality issues – High manufacturing quality ensures problems are addressed at the source, significantly reducing field-related errors.

Rack Solutions for Data Centers and Technical Rooms

barpa offers high-quality racks and enclosures, suitable for hospital data centers, technical rooms, and compact spaces—ensuring proper organization, ventilation, and safety for active equipment.
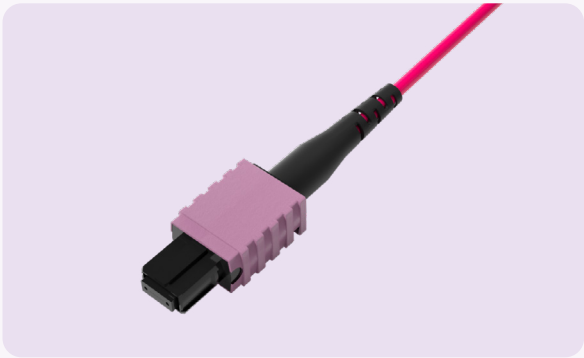
☑ Multiple formats to meet project requirements – from floor-standing to wall-mounted racks, with various static load capacities (60 kg, 800 kg, 1500 kg).

☑ Optimized thermal management – Efficient airflow reduces the risk of equipment overheating.

☑ Tailored solutions – We can develop and manufacture customized rack solutions to meet your specific needs.

Ease of Installation and Maintenance
Reduced CAPEX and OPEX

barpa develops innovative solutions to ensure fast, efficient cabling installation while reducing operational costs.
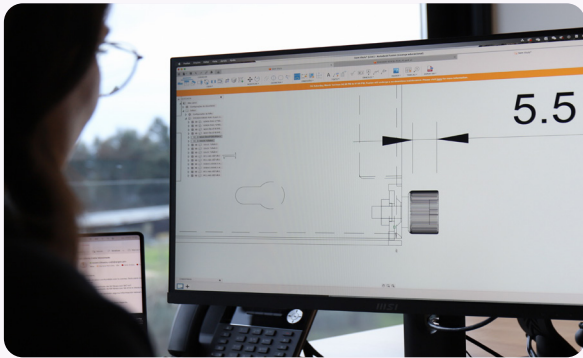
- ☑ **Screwless Fiber Optic Adapters** Speeds up assembly and reduces the risk of installation errors.

- ☑ **Toolless RJ45 Modules** – Enables quick installation without the need for additional tools.

- ☑ **RJ45 Panels with Integrated Cable Ties and Removable Back Plate** – Simplifies cable organization and shortens installation time.

- ☑ **Ability to Redo Connections in Case of Error** – Less material waste and greater installation efficiency.

MPO/MTP - Efficiency and Speed in Expanding Hospital Networks

With the exponential growth in data transmission needs across hospitals and laboratories, barpa offers pre-terminated MPO/MTP solutions, optimized for hospital data centers and high-density interconnections.

- ☑ **Up to 90% faster installation.** MPO/MTP connectors enable simultaneous termination of 8, 12, or 24 fibers, drastically reducing installation time.

- ☑ **Modular and scalable expansion.** Ideal for growing hospitals and clinics, facilitating seamless upgrades to 40G, 100G, and even 400G, without the need to replace the entire infrastructure.

- ☑ **High-density connectivity.** Reduces space usage in racks and panels, enabling more compact and organized infrastructures.

- ☑ **Fewer failure points and higher reliability.** By reducing the number of individual connectors, MPO/MTP solutions minimize optical loss and ensure better overall performance of hospital networks.

Custom Solution
Development

Our R&D team is ready to listen to your infrastructure needs and design a tailor-made solution precisely adapted to your requirements—fully prepared for streamlined production and implementation.

Benefits
of choosing barpa

barpa offers a complete ecosystem of structured cabling solutions, ensuring reliable connectivity, maximum security, and energy efficiency for hospitals, clinics, and laboratories.

With barpa, **healthcare infrastructures** are ready to meet future challenges **ensuring uninterrupted connectivity** and total security for critical medical applications.

Certified and Future-Ready Solutions

Secure, efficient, and sustainable networks

Faster installation and reduced operational costs

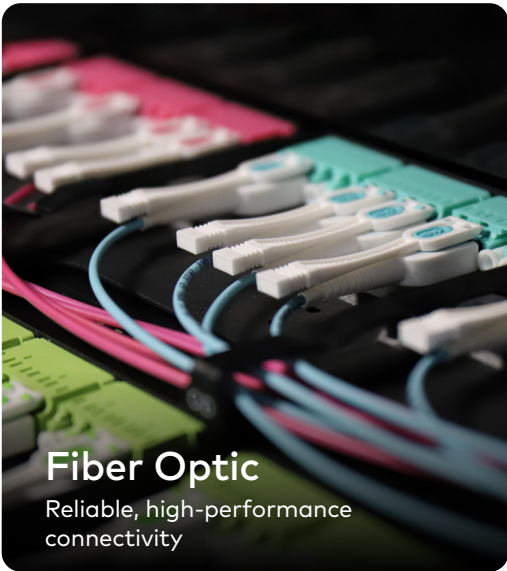**Specialized technical support for healthcare projects**

Ready to move forward?

Schedule a meeting with our sales team and discover how we can optimize connectivity and efficiency in healthcare infrastructures!

✉ 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.

Copper
Certified solutions with proven quality

Fiber Optic
Reliable, high-performance connectivity

Racks and Cabinets
Engineered for maximum safety and efficiency

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.

barpa

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

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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