



Smart Hospitals

Technology that saves lives



Digital Transformation and Hospitals of the Future

Digital transformation has brought great advances and trends for hospitals: new ways of providing services, modeling the predictive future (preventive and personalized), closer collaboration between the entire ecosystem and the adoption of more economical, accurate and less invasive treatments and therapies.

Smart Hospitals, or Hospitals 4.0, have appeared, marking the sector's transition to fully automated systems that combine machinery and digital processes in the way data is used.

Technologies such as cloud computing, 5G technology, AI, Big Data, 3D printing, neurolinguistic programming (NLP), Data as a Platform (DaaP) and Internet of Medical Things (IoMT) ensures the hospital's vital functions and well-being of the patients, as long as they are supported by a connected, sustainable and secure network infrastructure 24x7.

According to the “Deloitte Insights 2020 Global Health Care Outlook” study, which investigated trends that drive change across the global health ecosystem, some of the key issues that industry leaders must consider in order to establish a solid foundation for the future are:

- ✓ To invest in basic technologies for an acceptable level of digitization: digital prescription services, imaging diagnostics, communication and electronic location of devices, patients and doctors;
- ✓ To implement a robust and reliable IT infrastructure, with sufficient capacity for data storage, enabling access to medical records and information sharing;
- ✓ To solve interoperability problems, since hospitals deal with a large volume of information exchange on the internet with multiple systems, from different organizations;
- ✓ To establish a governance structure to support the culture of digital transformation, develop digital leadership skills and improve the digital cultural level of your teams and patients.

New trends and new market opportunities call for a unique network infrastructure.

Hospitals Cannot Stop

Hospitals still face many cost and complexity challenges in adopting disruptive technologies, but the long-term benefits will be numerous. Becoming smarter, through technology, increases efficiency, reduces costs and improves the experience of patients and professionals.



Connectivity

- ✓ The perfect connection for your applications;
- ✓ High bandwidth for images, database access and instant communication;
- ✓ All-in-one infrastructure;
- ✓ Centralized Website Management: High availability and reliability on the network.



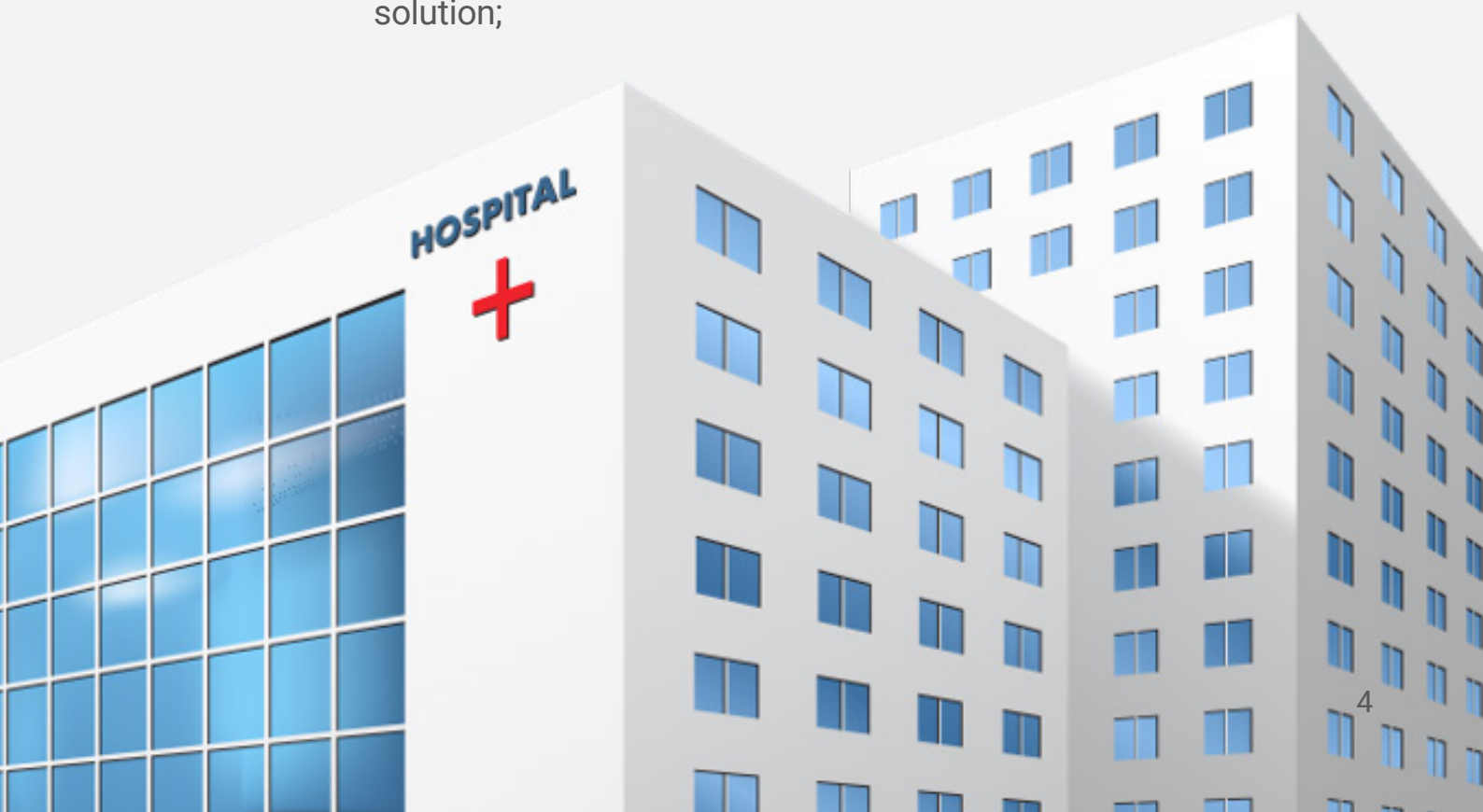
Safety

- ✓ Centralized management and monitoring of all occurrences, in real time;
- ✓ Proactive performance and security updates;
- ✓ Protection of sensitive data.



Sustainability

- ✓ Better use of space, infrastructure and HVAC reduction;
- ✓ Quick and simple implementation: Plug & Play solution;
- ✓ Digital Documentation (paperless hospital);
- ✓ Green cables: 100% recyclable.



Complete Solution: Health for Business

Furukawa offers a complete and robust connectivity solution and services that offer total efficiency in network performance and protection for all data traffic:

Data Center 400G Ready

Smart hospital data centers require high performance and flexibility to meet different demands for increased speed (and different distances). To ensure high data storage and transfer, Furukawa provides fiber optic technology. In addition: consultancy for implementation, application training and good practices in the 400G Ready concept, inspection during installation, extended warranty of up to 25 years and recycling of old cabling through Furukawa's Green IT Program

Managed IT

Furukawa's Hospital Solution centralizes management of the network infrastructure, significantly reducing the effort in the IT operation. It ensures the security of this data by practicing inventory and fault management (HIMSS) and an alarm for occurrences of unauthorized services, providing more visibility through management reports and greater agility in the recovery of failures. And it is more sustainable: the documentation is all digital (paperless hospital).

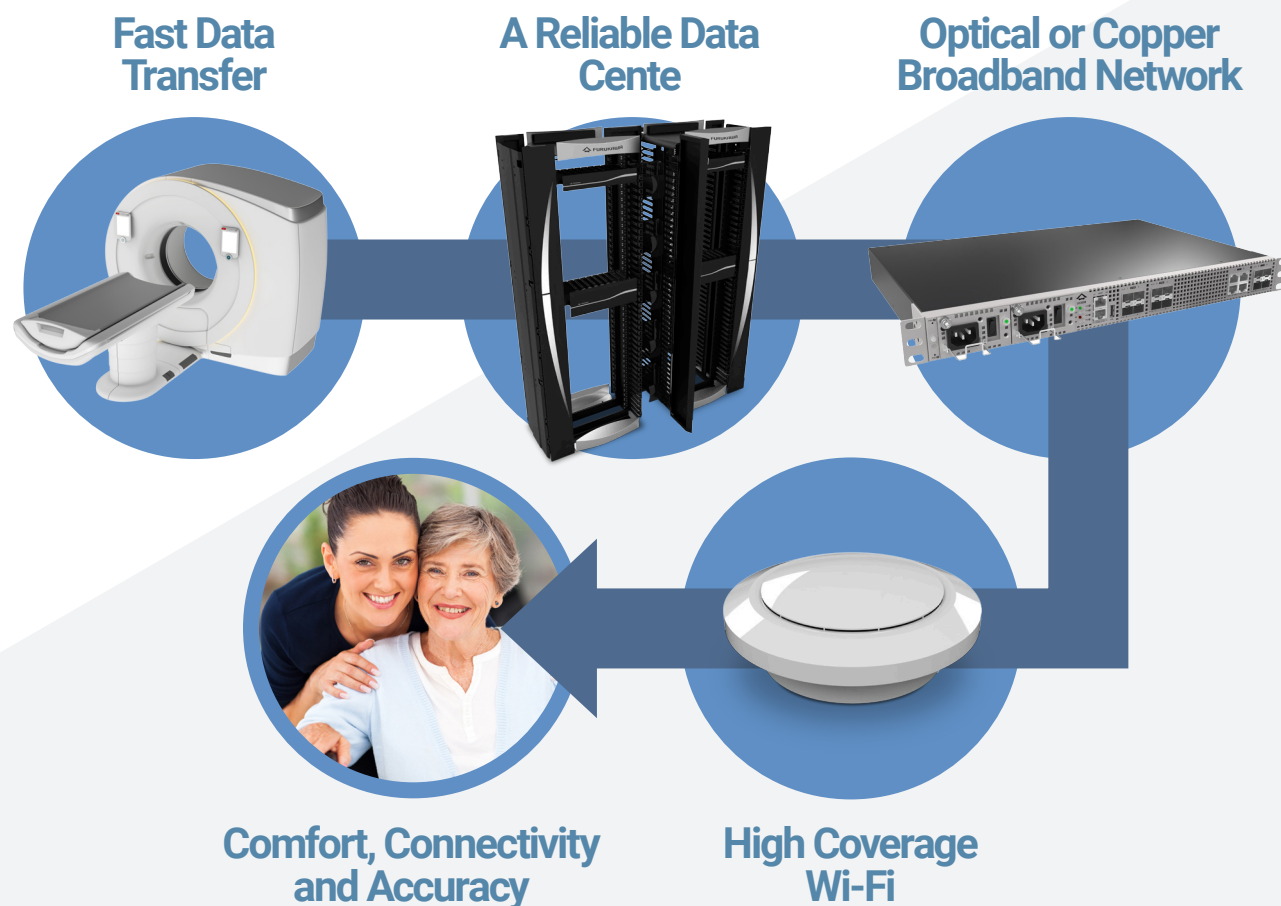
100% Optical Hospital

Furukawa's all-in-one optical infrastructure provides high availability (Carrier Class), electromagnetic immunity and security protocols and native encryption. And it requires less material, less space and consumes less energy. For your hospital, fewer technical rooms and more beds. Furukawa's all-in-one optical infrastructure provides high availability (Carrier Class), electromagnetic immunity and security protocols and native encryption. And it requires less material, less space and consumes less energy. For your hospital, fewer technical rooms and more beds.

Your Connected and Secure Environment

The quality of Furukawa products is certified by international bodies, which ensures connectivity even in the most aggressive environments: humidity, dust, fluids, etc. Ensured performance, whether in the operating room, in the laundry room or in the cleaning and disposal areas. And with total adherence to all hospital standards.

The Data Path Inside the Hospital



Healthcare companies around the world have Furukawa as the ideal partner for their connections. After all, it is years of history, innovation and integrity that have established it as a reliable and quality supplier. Among hospital customers connected with Furukawa solutions in Latin America, we highlight:

- ✓ Albert Einstein Hospital (Brazil);
- ✓ Clínica Alemana (Chile);
- ✓ Hospital Italiano (Argentina).

In Brazil, the Mater Dei Betim-Contagem hospital, in Minas Gerais, is yet another who has trusted in Furukawa's extensive experience. Find out how this hospital has achieved intelligent management of its network, more security and high availability in connections.

Case Study

Innovative Project Wins Furukawa Award



The Mater Dei Betim-Contagem hospital elected Furukawa to ensure high availability, security and reliability to its communication infrastructure. With the DataWave Furukawa solution, intelligent and centralized management of the physical infrastructure of the hospital's data center was installed at the Betim-Contagem unit, while the management solution is integrated to the network of the Mater Dei Contorno hospital, in Belo Horizonte, which also uses Furukawa's infrastructure. Thus, both locations, 35 km apart from each other, are being managed from a single centralized system, which provides a unified view of assets and ensures high availability and security in communication, which is reflected in the delivery of quality services to the customer.

The Mater Dei Betim-Contagem hospital also installed a Furukawa network infrastructure to support its mission-critical applications and maintain its information systems and telecommunications services. To address the issue of sustainability, it chose the Green cables, since reduced environmental impact is an important requirement in Mater Dei's network.

With approximately 6,600 network points, distributed among beds, an outpatient area, emergency room, administration and other areas of the hospital, in addition to copper cables, the project also uses Furukawa's pre-connectorized solution in optical fiber to support the initial connections of 40 Gbps and 100 Gbps and, for a second phase, 400 Gbps for the transmission of images for medical diagnosis, such as x-ray and tomography. With the project, the hospital gained a future-proof network, prepared to support the next applications.

6,600
network points
1st Phase
Up to 100 Gbps

2nd Phase
Up to 400 Gbps



Why Furukawa?

Furukawa has competitive features in providing full support to hospitals, customers and business partners in advancing their journeys towards digital transformation, with specialized support services:

- ✓ Advisory service;
- ✓ Pre-project, training and capacity building program;
- ✓ Vast network of distributors and integrators;
- ✓ Specialized engineering, start-up and monitoring services;
- ✓ Extended warranty up to 25 years.





Revision 1 - April/2021 Pictures for illustration purposes only.
Products may be changed without prior notice. Always consult your Furukawa dealer.

Have your hospital connected to digital medicine.
Optimize your medical team's work.
Ensure the equipment is securely connected.
Improve your patients' experience.



Check our website to know more!