



MULTI-SERVICE NETWORKS

Multi-service networks are the backbone which supports the IP world and, as a result, the world of new technology. Its infrastructures are continually changing but are also linked to the environments of installation and construction.

The two main challenges for multi-service networks are speed and security.

- Speed has steadily increased since these networks were first introduced, given that the available content has grown in an exponential manner, with an increasingly common demand for high-quality audio and video content.
- Security has become a basic premise as in these networks circulate large quantities of sensitive data for organisations and private individuals.

The SICE Tecnología y Sistemas group has extensive experience installing and managing multi-service networks in very different environments, from major installations with head offices with more than 40,000 points to corporations with a fleet of more than 2,000 small offices, using wired and/or wireless technologies and supporting data processing centres. Through its company TELSA, the group has installed, maintained and managed multi-service networks since the introduction of this technology.

WIRELESS NETWORKS

Wireless networks started out as a complement to wired networks. Their advantages include mobility and lower costs related to wired networks.

Changes to wireless technologies has meant that they are no longer a complement and instead a real alternative to wired networks. The increase in the number of Smartphone and Tablet devices, which use wireless networks, was the final push.

Currently these networks are an operational necessity for corporations and a real alternative to wired networks.

The SICE Tecnología y Sistemas group, through its company TELSA, carries out large-scale installation of wireless mesh networks, which comply with the highest security standards and integrate into the main sector manufacturers.

WIRED NETWORKS IN CORPORATE ENVIRONMENTS

Structured wiring networks originated in the corporate environment which is where they have been most significantly developed.

The SICE TyS group integrates the main market solutions at a global level, with qualified engineers and the highest standards of quality and international recommendations, both ISO and IEEE. As a result, it recommends the use of category 6 and 6A wires for horizontal wiring at a workplace, OM3 and OM4 for vertical links and 6A copper links for the same.



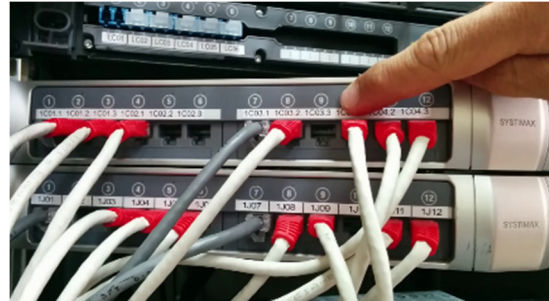
The SICE TyS group uses the best material resources for installation and testing, with a modern fleet of fibre optic fusion splicers for core alignment, network analysers and optical reflectometers which are calibrated annually, as well as staff which are highly qualified in the use of machinery.

TELSA, a company of the SICE TyS group, has carried out major installations in this environment, with 26,000 points installed in the BBVA 'financial city'.



WIRING SYSTEMS FOR DPC ENVIRONMENTS

Currently, with the arrival of the cloud and process virtualisation, the volume of data which is managed from DPC (Data Processing Centres, the hearts of these systems) is enormous and continues to grow at a rapid pace. As a result, the wiring required to support this growth must reflect this requirement.



The SICE TyS group, through its company TELSA, integrates solutions from the key international manufacturers in this environment, and recommends compliance with international standards and IEEE indications: Intelligent patch management systems, copper category 6A and multi-mode OM3 and OM4 fibre optics; as well as the use of pre-terminated fibre systems and fibre MPO connectors.



INTELLIGENT PATCH MANAGEMENT SYSTEMS

Intelligent patch management systems allow automated and fault-tolerant control of the physical layer of communication systems. It is recommended in DPC environments and environments with major structured wiring networks.

It is made up of patch panels with sensors, automated and in a rack, which manage the sensors and central software which unites all the wiring information. They allow integration with the network electronics and other IP devices, as well as integration of CAD information.

The SICE TyS group has extensive experience in this type of integration, having installed up to 41,000 points.

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