TELTONIKA | Networks

USE CASE // INDUSTRIAL & AUTOMATION

RELIABLE CONNECTION OF INDUSTRIAL SYSTEMS

HIGHLIGHTS

Senabling legacy manufacturing equipment to work as one cohesive system is a tough challenge when each supports communication standards and protocols incompatible with the other.

This solution was completed with the TSW114 and its five Gigabit Ethernet ports to ensure communication and data transmission between the equipment and the server. Thanks to its plug-n-play nature, the switch becomes a very convenient intermediary between equipment.

The TSW114 is particularly great in this case due to its industrial design; with anodized aluminum housing, an integrated DIN rail bracket, and front-facing ports, this switch can effortlessly adapt to harsh environmental conditions and space limitations.

THE CHALLENGE – THE MISSING LINK

The rise of IoT has revolutionized the industrial sector, causing it to embrace automation to remain competitive and maximize its potential in terms of time management, productivity, and scale. As a result, industrial communication between machinery must change accordingly.

However, a problem arises when automation is applied to legacy machinery, due to the myriad of incompatible standards and protocols that have accumulated over the years. To bypass this issue, Ethernet connectivity emerges as the go-to technology for industrial communication, as it's more flexible, economical, and speedy.

Manufacturing equipment is known for dealing with loads of data that gets continuously transmitted among the machines, so there's no room for delays and underperformance. It requires professional networking tools that are reliable, sturdy, and easy to deploy. After all, a solution is only worth as much as its' weakest link.





THE SOLUTION – GIVING LEGACY EQUIPMENT A NEW LIGHT

In factories, there are typically multiple production lines comprising of an array of HMIs, PLCs, and sensors. All must be connected to a network for communication between equipment and the server for reaching, controlling, and commanding purposes. The good thing is that there's a perfect industrial switch for achieving this – the plug-n-play TSW114!

To tie all legacy equipment into one cohesive and up-to-date system, our TSW114 Gigabit DIN rail switch acts as an intermediary between machines and server. With five Gigabit Ethernet ports and total bandwidth reaching up to 10 Gbps, the TSW114 upholds robust connectivity and brings high-bandwidth data transmission capabilities to the table. As a result of that, each manufacturing equipment can transmit data to the server for data processing and analysis.

Besides that, the TSW114 brings added convenience thanks to its industrial design and compact size (113.1 x 27.4 x 80.5 mm). The switch has anodized aluminum housing, an integrated DIN rail bracket, and front-facing ports, allowing you to install as many switches as you need in any industrial environment – effortlessly. Importantly, the TSW114 is equipped with an industrial 2-pin DC socket and open wires, allowing for direct connection to each manufacturing line cabinet without requiring a power plug.

