Cogeneration and remote control solution

A manufacturing company with high electricity and heat consumption chose ENWE to implement a technological solution that could improve the energy efficiency of its plant. After an analysis of the loads and consumption profiles, a **cogeneration plant** was built to cover the internal electricity needs by recovering the heat produced to heat and produce domestic hot water.

Considering the presence of constant refrigeration users, ENWE has also proposed a **trigeneration** system that exploits the heat of the cogenerator to power an absorption heat pump, generating cold water for the company's cooling systems.

Each ENWE production plant is equipped with a **SCADA** interface (proprietary or standard), with the possibility of remote control via the inverter manufacturer's cloud. However, the company's security policies did not allow access to the internal network via VPN.

To resolve this issue, **GW525** with a dedicated data SIM was installed. This gateway made it possible to send the operating parameters to the **RILHEVA cloud**, without using the company's IT infrastructure. The connection was made via **MODBUS RTU**, avoiding complex configurations such as port mapping and ensuring complete separation from the customer's network.

Thanks to this architecture, ENWE can **monitor the plant in real time**, access detailed reports and manage the system efficiently and safely, with a highly customizable and high-performance platform compared to standard monitoring tools.