Remote Monitoring for Hydraulic Press

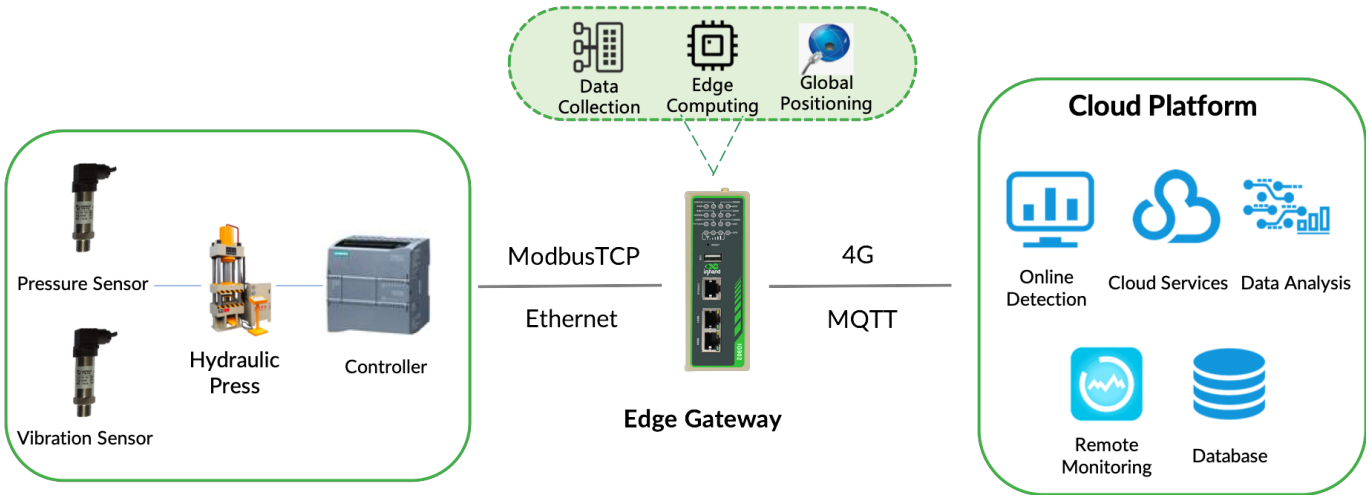
Featuring large sizes, complex structures and underground working environments, hydraulic press is exposed to serious risks if not used properly. With powerful edge computing capabilities and support for multiple industrial protocols, the IG902 offers a simple, complete and efficient remote monitoring and diagnostic solution for hydraulic equipment.

Background

Large hydraulic equipment is indispensable in the construction of infrastructure such as metro lines.
Featuring large sizes, complex structures and underground working environments, the machines are exposed to serious risks if not used properly.
Therefore, it is necessary to apply advanced monitoring and diagnostic technology for machinery.

An online monitoring system is expected not only to predict equipment failures, but also optimize itself.
InHand Networks offers a simple, complete and efficient remote monitoring and diagnostic solution for hydraulic equipment.

Remote Monitoring of Hydraulic Press with Edge Computing



Sensors, hydraulic press, controllers and other devices on site are connected to the edge computing gateway via their respective protocols.
With Python custom development feature, the customer can define the criteria for data processing.
After data collection and pre-processing locally, the IG902 then sends the filtered data to the cloud via MQTT for further analysis.

Advantages:

- With the Python custom development feature, the user can customize intelligent logical processing of raw data, local preprocessing, and therefore reduce workload in the cloud.
- The edge computing gateway supports resume from breakpoint. With built-in FLASH 8GB eMMC, it supports TF card expansion, with a maximum storage of 128G.
- Multiple industrial protocols are supported including Modbus RTU/TCP, ISO on TCP, EtherNet/IP, etc., effortlessly connected to PLCs of Schneider, Siemens, Rockwell and more.
- InHand's "cloud + edge" solution greatly shortens the debugging time and easies the deployment labor on the front.
- Data are transmitted to the cloud via MQTT IoT protocol, which outperforms the traditional VPN.
- CE, FCC, PTCRB, CCC, Verizon Wireless, AT&T certified.
- Full industrial design, reliable, secure and stable data transmission for unattended sites.