

Monitoring equipment on remote

Various large mechanical equipments (such as unmanned production line robots, CNC machine tools, injection molding equipment, compressors, HVAC equipment) have a long service life, and need after-sales support in the long-term use process for much maintenance and troubleshooting.

At present, these equipments generally depend on manual troubleshooting and on-site inspection. However, due to their high volume, it is time-consuming and labor-intensive to maintain them by traditional manner. There is much delay in afterward troubleshooting, causing inconvenience to users and low efficiency.

Real-time transmission of operation and maintenance data

In the actual application scenario, these equipments can use the Synway DTU product to transmit real-time data in real-time. The data center is connected to these terminal equipments to realize real-time data monitoring of the devices for 365 days*24 hours.

Remote monitoring operation

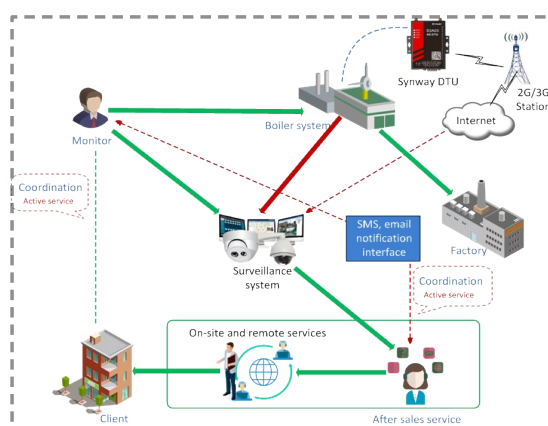
Through online monitoring, the dispatch center (data center) can grasp data of running status of the equipments in real time, and adjust the operating parameters to the optimal state through remote control, achieving a more reliable and efficient state. Besides, it also helps reduce the number of expatriates, save manpower and travel expenses, and improve the overall utilization of equipment.

Incident alarm, remote maintenance

Receive the alarm information pushed by the system in real time and release the alarm data to set up the alarm record history; Information inquiry; product upgrade, device pre-alarm, fault SMS alarm prompt, etc., all of which greatly reduce equipment failure rate, shorten equipment failure time, improve customer satisfaction, and minimize loss caused by equipment failure and maintenance; At the same time, the equipments can also adopt centralized, unified monitoring and management and remote operation and maintenance of all terminal products through various cloud-based management platforms.

Applications

Industrial boiler wireless monitoring: The boiler is equipped with multiple sensors such as temperature, pressure, smoke, water hardness, etc. Once the boiler works, its sensors automatically feed various types of data of the boiler operation to Synway DTU modules, which connect to the wireless network and implement real-time transmission to the customer's remote monitoring center. The management center analyzes the real-time curves and data reports provided by the system. Once any abnormalities or deviations in the operational data are found, the system automatically sends emails or information to the after-sales service personnel to provide timely maintenance solutions for those devices that operate abnormally.



Self-help wireless terminal equipment

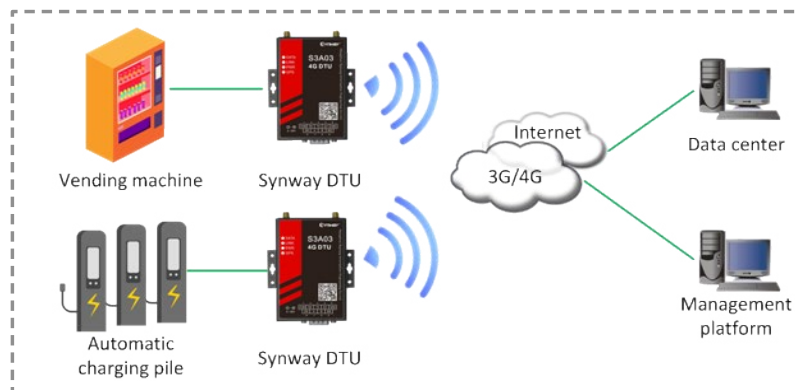
New energy recharging device

In the application of new energy, the recharging device is very commonly available, and the recharging device function is similar to traditional gas dispenser. However, recharging devices are distributed in wide area, and difficult to manage. And with the rapid development of new energy vehicles, the recharging network topology has to be flexible and scalable. There are strict requirements for communication reliability, including harsh environments, electromagnetic interference or noise interference in the long run. The system has to not only maintain reliable communications, but also minimize the construction and maintenance cost. By using Synway DTU equipment for data transmission, installation, operation and maintenance, recharging devices can be optimized to better fit to the new energy industry.



Self-service terminal device

In real life, the self-service terminal device is dedicated to serving customers, and can realize functions such as sales, collection, payment, and inquiry. Because of the convenient and instant service mode of self-service wireless terminal equipment, they have become a lifestyle, and all kinds of wireless self-service terminal devices can use Synway DTU equipment. Through 3G/4G wireless network, wireless terminal equipment and data monitoring center can establish transparent data channels to control and scrutinize wireless self-service equipment. By networking, the DTU device can automatically and timely report state of the self-service wireless terminal device, and 24-hour network monitoring can ensure efficient operation of the terminal device.



Self-service wireless terminal equipment IoT application

Based on 4G/3G wireless network, Synway DTU can help self-service terminal wireless device to connect Internet. Each self-service machine is a terminal in the network. Through wireless connection, self-service terminal operators can monitor the status of each self-service terminal in real time and adjust supply chain and electronic promotional advertising at any time.

Synway DTU equipment fulfills the need for stable and reliable running of remote wireless terminals. Synway DTU adopts industrial-grade design and intelligent anti-drop line, which can effectively guarantee the normal operation of the distributed wireless system.

Intelligent public communication wireless application

In the field of public intelligent transportation, Synway DTU equipment has also been widely used in diverse applications, among which include bus E-card wireless IoT application and wireless IoT application of co-shared bicycle. These public transportation systems are usually composed of data monitoring center, transmission equipment (DTU), data acquisition equipment, terminal vehicle. In this sophisticated system, DTU connected to 3G/4G network, transmits the vehicle positioning information, bus card information, vehicle working status and other data to the monitoring center in real time, which then interacts with the intelligent parking system, the clearing system, and other application systems. This enables the data service center to effectively control various vehicles.

Highway Monitoring IoT application

With monitoring system built on Synway DTU wireless equipment, traffic administrators can transmit data, real-time monitor road condition and traffic events, implement automatic alarm and video recording at 24*7, and coordination across division to improve management capability.

Digital transmission field application



Smart POS
Scanning code PDA
Cashier



Car DVR, car T-BOX
Car navigation, vehicle tracking
Cargo tracking, OBD



Smoke video surveillance
Intelligent access control, gas detector
intercom system, police service, law enforcement



Utility meter, water meter
Heating meter, gas meter
Charging pile, smart grid



Smart medical, intelligent street light
Intelligent building, co-shared bicycle
Intelligent parking lot, digital signage



Industrial router
CPE, VoIP equipment
Digital transmission unit DTU

About Synway

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