

Background

Oil and gas resources are important strategic mineral resources, and it is also an important material basis for my country's economic development. Chinese oil and gas exploration and production have made major breakthroughs in many places, effectively guaranteeing the security of the country's energy resources. An oil field is composed of multiple oil wells, metering rooms, manifold manifolds, oil transfer stations, joint stations, crude oil delivery systems, oil tanks and other decentralized facilities in the oil field. At present, most people manually check the operation status of equipment daily and measure and count oil production data, but this method will inevitably increase the labor intensity of workers and affect the real-time and even accuracy of equipment monitoring and oil production data.



Challenge

- 1. Single function, poor adaptability on site, complex environment.
- 2. Difficult data collection, unable to monitor in real time.
- 3. The safety factor is low, such as the abnormal high pressure caused by the drilling pump, which causes dangerous accidents such as the occurrence of overflow accidents when the grouting is not carried out in time when drilling.

Introduction

There are many sensors and monitoring instruments in the real-time monitoring unit of oil and gas drilling sensors. Emdoor Info recommends an embedded fanless industrial computer EM-MP200S for the detection unit, which transfers the monitored data and signals to wireless transmission. Online real-time monitoring of drilling fluid viscosity, shear force, water loss, density, import and export flow rate and other performance indicators. The IPC can transmit the data to the designated IP database, computer equipment, multiple display terminals and central console in real time. The central control station is set in the drilling room control room, and the data calculation processing is set at the team headquarters, mud logging, mud, technicians and other places. Real-time monitoring of downhole and surface parameters during drilling, remote monitoring, remote decision-making and digital drilling have become the development trend of drilling, enabling the realization of "digital oil field".





EM-MP200S







Advantage

- 1. Monitoring automation, real-time data transmission, and real-time processing through monitoring to improve operating efficiency and optimize drilling performance.
- 2. Intelligent protections, improve safety performance, greatly reduce the risk of oil drilling, and ensure the safety of life and property.
- 3. The industrial design of the equipment is suitable for various outdoor harsh environments, avoiding accidents caused by equipment intolerance.







Linux



Fanless



Anti-EMI



Wide Voltage

Product Dimension Interface













