Emdoor Info IPC is Used in Automated Manufacturing

Background

Although many people worry that large-scale automated production will deprive them of employment opportunities, these robots also protect workers from harmful fumes, hot molded products and other dangerous situations, and eliminate the negligence caused by cumbersome operations and shift fatigue human error. Advances in robotics have led to ever-increasing manufacturing speed and accuracy, thereby giving automakers an important competitive advantage in producing quality cars. Safety, quality and productivity are the main reasons for using robotics.

Automated production management on the production line is a complicated operation, because a car requires tens of thousands of parts, and the factory produces thousands of cars every day. In order to meet the needs of car buyers, manufacturers will replace new models every few years. For the achieve high-quality, high-yield, flexible production and seamlessly integrated processes, there must be a production planning system with precise computer-controlled processes.

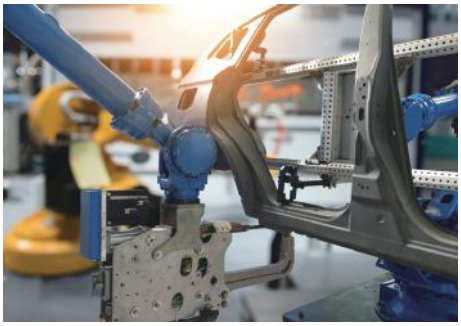
Challenge

1. Unstable interface, poor performance, and the external functions and data collection are difficult;
2. The environment of the production plant is complex and changeable, testing the robustness of the machine.

EM-HPC8J

Introduction

At each workstation in the assembly plant, Emdoor Info EM-HPC8J provides it with the appropriate power supply, local area network and VGA interface. It is installed behind the robot's monitor and can be passed through the power supply, network, monitoring sensors and actuators. Lock the wires and cables to prevent any wires or cables from falling off, causing operation failure or interruption. In order to realize data collection, data display and remote monitoring and control functions, EM-HPC8J provides powerful hardware performance for the automation platform. With the help of the hardware provided by Emdoor, the retrofitable system will be used to provide information about the next item that needs to be installed during the assembly process (operation instructions) and display the information on the installed display for the field operator View. When EM-HPC8J finds any problems based on the data collected from the safety sensors, it will immediately stop the process to avoid damage and reduce financial losses. For display options, it provides VGA and an optional third display interface. It adopts Intel J1900 processor, which provides excellent computing performance with high-speed automated automotive production lines.



Advantage

1. Fanless/wide voltage/wide temperature/lockable cable design ensures reliability and stability in industrial applications;
2. VGA/HDMI/optional 3rd display interface for multi-function display;
3. High-performance computing performance and rich I/O meet data collection and analysis requirements;
4. Emdoor Info permanent service and long life cycle support.

Windows Linux Front Panel IP65 Touch Screen Fanless Anti-EMI Wide Voltage