Application Scenario
How Process Visualization Works in the Factory

Pain Points of Global Manufacturers

No Response in Real Time
Unexpected downtimes often happen during changing conditions, which might take a long time to troubleshoot at great cost. Since it is nearly impossible for engineers to be on standby during every change, they are ready to find a convenient method to view field information remotely and respond to faults in real time.

Decisions without Verifiable Data
As factories target not only higher production rates but also diverse product offerings, the management of complex processes becomes much more critical. Managers are looking for a single simple interface which is able to summarize the results of multiple processes and visually show the performance efficiency of each task in real time on a dashboard. Furthermore, management decisions need to be made quickly based on both the experience of senior employees and on real-time data analysis.

Traceability for Consistent Quality
Market demands require more rapid access and diverse offerings, consistency of quality and compliance, as well as the need for traceability. Traceability involves tracking and tracing the history and details of all aspects of production as well as the authentication of manufacturing such as serial numbers linking back to the production chain. To achieve these advanced metrics, manufacturers require full transparency over the entire production process and full integration with their MES systems.

Ordering Configuration Table

SRP-FPV220 MES Optimization & Environmental Monitoring

Package Offering

<table>
<thead>
<tr>
<th>Application Software</th>
<th>Microsoft Windows Embedded 7 Pro x1</th>
<th>Microsoft Windows Embedded 7 Pro x1</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Computing</td>
<td>UNO-2483G-434AE x1</td>
<td>Win CE 6.0</td>
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<tr>
<td></td>
<td>WISE-4012-AE x1</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Optional Configuration</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Option 100: Wise-PaaS/Software</td>
<td>Configuration is sent to the user.</td>
</tr>
<tr>
<td>Option 200: System Computing</td>
<td>Configuration is sent to the user.</td>
</tr>
<tr>
<td>Option 300: I/O &amp; Peripherals</td>
<td>Configuration is sent to the user.</td>
</tr>
</tbody>
</table>

Order in 3 Easy Steps

1. Go Online Store
2. Add to Cart
3. Confirm Order

Order Approval
95.3%
Yield Rate
95.3%
Order Backlog
233
Order Achievement
73.1%
Entering a New Era of Smart Manufacturing

Introducing SRP-FPV220 Solution for MES Integration & Production Optimization

This Solution Ready Platform allows users to easily collect data from shop-floor devices via multiple communications such as Modbus, OPC UA, and MQTT and automatically generates Excel reports of production activities. A 100% web-based dashboard allows users to view real-time production information on any mobile device supporting HTML5 browsers. Valuable information about field equipment, energy consumption, and the environment can also be integrated within the MES system using open interfaces including SQL databases and RESTful APIs to help optimize production planning and provide efficiency analysis improvements.

### System Block Diagram

- **WebAccess/App**
  - Production dashboard
  - Alarm notification

- **Conversion Service**
  - SCADA Features
    - Connectivity
    - Visualization
    - Alarm
    - Data Logger
    - RESTful/ MQTT

- **MES Situation Room**
  - Shop-floor Information Visualization
  - Shop-floor Information Visualization
  - Web-based

- **Dashboard Everywhere**
  - Web-based

- **WebAccess/SCADA**
  - HTML 5 Dashboard
  - Alarm History
  - Embedded video from IP cameras into Web page
  - Support motion detection with WebAccess/SCADA Software

- **SCADA Features**
  - Connectivity with OPCUA
  - Visualization with HTML5 Dashboard
  - Alarm History
  - Data Logger
  - RESTful/ MQTT

- **Shop-floor Information Visualization**
  - Collect equipment and environmental data from various shop-floor devices and automatically generate Excel charts & reports of production activities.

- **Mobility of Production Monitoring with Dashboard**
  - The HTML5-based dashboard allows users to view real-time production information such as equipment utilization, yield rates, and downtime alarms on any mobile device.

- **Easily Integrated with MES System by Open API**
  - Valuable information of field equipment, energy consumption, and the environment can also be integrated within the MES system using open interfaces to help optimize production planning and efficiency analysis.

- **WebAccess/SCADA Runtime Software**
  - Pre-installed WebAccess/SCADA Pro, Runtime 1500 tags
  - Intel® Core™ i3 Regular-Size Automation Computer, 8GB RAM, 128G SSD, Microsoft® Windows Embedded 7 Pro.

- **WISE-4012-AE**
  - 4-ch Universal Input and 2-ch Digital Output IoT Wireless IoT Module

### Key Advantages/ Features

- **Conversion Service**
  - Production dashboard
  - Alarm notification

- **Dashboard Everywhere**
  - Web-based

- **WebAccess/SCADA**
  - HTML 5 Dashboard
  - Alarm History
  - Embedded video from IP cameras into Web page.
  - Support motion detection with WebAccess/SCADA Software

- **Alarm**
  - Active alarm message
  - Email/ SMS/ Audio Notification
  - Alarm History
  - Prompt alarm on screen

- **Mobility of Production Monitoring with Dashboard**
  - The HTML5-based dashboard allows users to view real-time production information such as equipment utilization, yield rates, and downtime alarms on any mobile device.

- **Easily Integrated with MES System by Open API**
  - Valuable information of field equipment, energy consumption, and the environment can also be integrated within the MES system using open interfaces to help optimize production planning and efficiency analysis.

### Solution-Ready-Platform Package

- **UNO-2483G-434AE**
  - Intel® Core™ i3 Regular-Size Automation Computer, 8GB RAM, 128G SSD, Microsoft® Windows Embedded 7 Pro.

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  - 4-ch Universal Input and 2-ch Digital Output IoT Wireless IoT Module