# **iFactory**

Solution Ready Platform

# **Equipment Connectivity Solution**

**Machine Data Acquisition for Monitoring & Optimization** 

SRP-FEC220







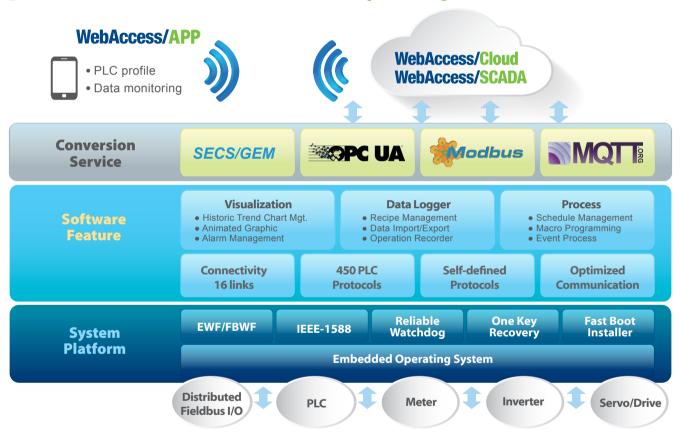


## **Entering a New Era of Smart Manufacturing**

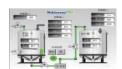
Introducing SRP-FEC220 Solution for Machine Monitoring & Optimization

This Solution Ready Platform allows users to easily acquire 100% of equipment data through 450 PLC drivers, self-defined communication protocols and a distributed digital I/O module. Equipment data is available for OT/IT system integration via Modbus/ OPC UA/ MQTT with visible production information, optimized production profiles and more.

## Software Architecture and Key Design Features



## **HMI Design Features**



#### **Animated dashboard**

- 1. Dynamic numerical value display
- 2. Pipeline & dynamic flow diagram
- 3. Bar chart/ histogram
- 4. Rich automation device icon library



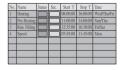
#### Alarm

- 1. Active alarm message
- 2. Alarm by email
- 3. Alarm history
- 4. Alarm history export (Excel CSV)



## History

- 1. Historical trend chart
- 2. Historical table for search
- 3. Historical data export (Excel CSV)



## Schedule

- 1. Calendar chart
- 2. Weekly event schedule
- 3. Pre-schedule process parameter

## System Block Diagram

## WebAccess/APP



- PLC profile
- Data monitoring



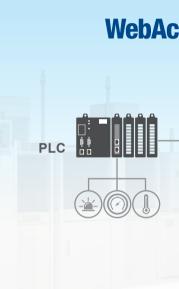


WebAcce WebAcce

## SECS/GEM







Comprehensiv

## Key Advantages/ Features

### 100% Data Acquisition

Supports 450 PLC communication drivers and self-defined protocol to completely acquire controller status, temperature, humidity and other sensor data.



#### **Flexible Protocols Conversion**

Greatly shortens engineering time through intuitive UI setting to rapidly covert protocols for a max. of 15 different branded PLCs simultaneously.



## **Easily Connect OT and IT**

Supports Modbus / OPC UA/ MQTT connection to SCADA/ MES system to optimize production efficiency.





- Open interface for cloud dashboard monitoring & big data analysis
- Precaution alarm for equipment preventive maintenance











## Solution-Ready-Platform Package

#### WebAccess/HMI Runtime Software

Pre-installed WebAccess/HMI Runtime 1500 tags

## UNO-2271G-E23AE

Intel® Atom™ E3815 1.46 GHz Pocket-Size DIN-Rail PC, 4GB RAM, 32G eMMC Storage, Microsoft® Windows Embedded 7 Pro

#### **ADAM-6060-CE**

6-ch Digital Input and 6-ch Power Relay Modbus TCP Module





## Application Scenario

**How Equipment Connectivity Works in the Factory** 

**Machine/Cabinet** 



#### **Pain Points of Global Manufacturers**

#### Data in Black Box

To optimize equipment performance and reliability, engineering teams always make improvements through machine operation data analysis, temperature monitoring, or power consumption. However, data is sometimes contradictory due to the sensors, meters, or PLC controllers being limited in connectivity and different devices from different vendors each having their own proprietary protocols.

### **High Wall of Communication**

Proprietary communications obstructing machinery data integration usually require knowledge of driver development and comprehensive coding effort to complete protocol transfer.

## **Infeasible for Analysis**

Advanced data analysis is always done by IT systems with powerful computational capabilities. Nevertheless, open communications such as Modbus/ MQTT/ OPC are required for bridging devices at the OT level and system analysis at the IT level.





## Ordering Configuration Table

SRP-FEC220 Machine Monitoring & Optimization  Package Offering			
System Computing: UNO-2271G-E23AE x1 Intel® Atom™ Pocket-Size Automation Computer, 32G eMMC	Peripherals: ADAM-6060-CE x1 6-ch Digital Input and 6-ch Power Relay Modbus TCP Module		

## **Optional Configuration**

Option 100 WISE-PaaS/SaaS Software		Option 400 Add-on Accessories		
[101] WebAccess/SCADA Dongle Key V8.2 Pro. 1500 tags (WA-P82-U15HE) [102] WebAccess/SCADA Dongle Key V8.2 Pro. 5000 tags	□ Qty:	[401] Power Adaptor (PWR-247-CE)	Qty:	
(WA-P82-U50HE)	Qty:			
Option 200 System Computing	on 200 System Computing		Option 800 Training & Consulting Service	
[201] 12.1" XGA Ind. Monitor w/ Resistive TS (FPM-7121T-R3AE) *HDMI to VGA Adapter is required	Qty:	[801] 1 Hr Quick Start Phone Support	☐ Qty:	
Option 300 I/O & Peripherals		Remark		
[301] Distributed Digital I/O (ADAM-6060-CE)	Qty:			
[302] Distributed Analog I/O (ADAM-6024-A1E)	Qty:			

## Order in 3 Easy Steps







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SRP-FEC220 Online Catalog