

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.



See what will happen...

Extend Equipment Lifespan:
Increase the value of legacy equipment with multiple protocol conversions.

Digitize Manufacturing Information:
Improve manufacturing efficiency by real-time production monitoring and machine status diagnosis.

Ordering Configuration Table

SRP-FEC220 Machine Monitoring & Optimization	
Package Offering	
Application Software : WebAccess/HMI Runtime 1500 tags x1 <i>Preinstalled WebAccess/HMI Runtime 1500 tags</i>	OS : Microsoft® Windows Embedded 7 Pro x1 <i>Preinstalled Microsoft Windows Embedded 7 Pro</i>
System Computing : UNO-2271G-E23AE x1 <i>Intel® Atom™ Pocket-Size Automation Computer, 32G eMMC</i>	Peripherals: ADAM-6060-CE x1 <i>6-ch Digital Input and 6-ch Power Relay Modbus TCP Module</i>

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) <input type="checkbox"/> Qty: ____ [102] WebAccess/SCADA Dongle Key V8.2 Pro. 5000 tags (WA-P82-U50HE) <input type="checkbox"/> Qty: ____	[401] Power Adaptor (PWR-247-CE) <input type="checkbox"/> Qty: ____
Option 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 <input type="checkbox"/> Qty: ____	[801] 1 Hr Quick Start Phone Support <input type="checkbox"/> Qty: ____
Option 300 I/O & Peripherals	Remark
[301] Distributed Digital I/O (ADAM-6060-CE) <input type="checkbox"/> Qty: ____ [302] Distributed Analog I/O (ADAM-6024-A1E) <input type="checkbox"/> Qty: ____	

Order in 3 Easy Steps

Go Online Store

1.

Step 1: Login

Add to Cart

2.

Step 2: Configuration

Confirm Order

3.

Step 3: Check & Submit

ADVANTECH
Enabling an Intelligent Planet

Advantech Headquarters
No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei, Taiwan 11491
Tel: 886-2-2792-7818 Fax: 886-2-2794-7301
www.advantech.com

US/Canada: 1-888-576-9668
Europe: 00800-2426-8080/8081
China: 800-810-0345/8389
Taiwan: 800-777-1111
Japan: 0800-500-1055
Korea: 080-363-9494/9495

Singapore: +65-6442-1000
Malaysia: 1800-88-1809
Australia: 1300-308-531
Thailand: 66-2-248-3140
Indonesia: +62-21-7511939
Mexico: 1-800-467-2415

SRP-FEC220
Online Catalog

iFactory

Solution Ready Platform

Equipment Connectivity Solution

Machine Data Acquisition for Monitoring & Optimization

SRP-FEC220

WebAccess/Cloud
WebAccess/SCADA

WebAccess/HMI

- ✓ 100% Data Acquisition
- ✓ Easy Protocol Conversion
- ✓ Connect OT to IT

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ADVANTECH
WISE-PaaS
IoT Software Platform

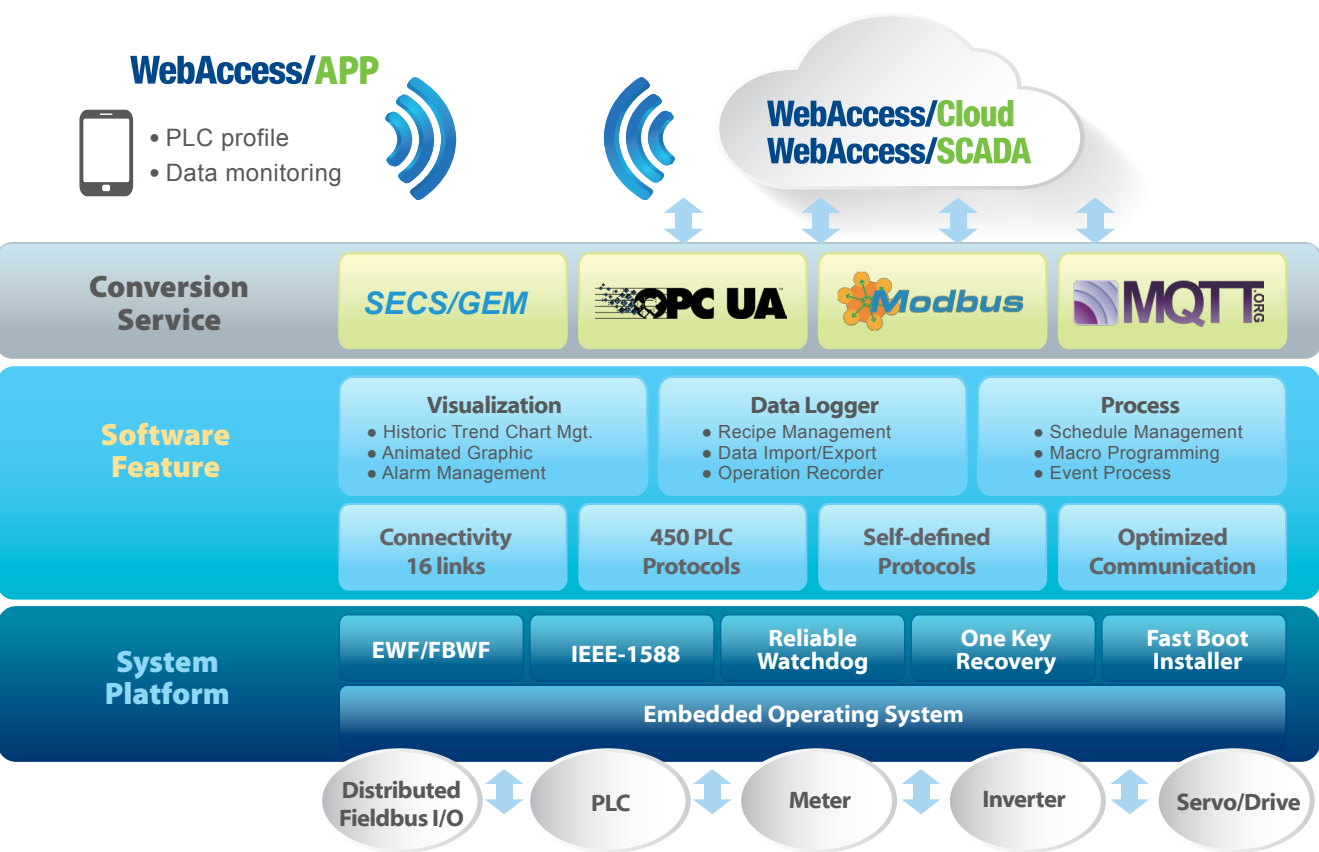
More on SRP-FEC220 website

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



History

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

Alarm

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

Schedule

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

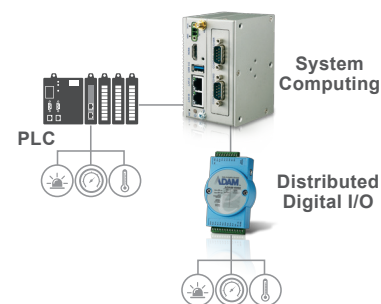
System Block Diagram



Key Advantages/ Features

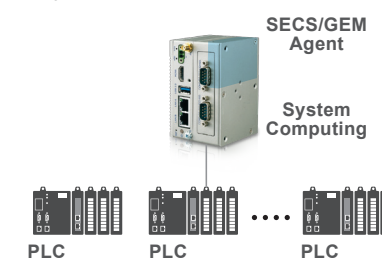
100% Data Acquisition

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.



Solution-Ready-Platform Package

WebAccess/HMI Runtime Software

Pre-installed WebAccess/HMI Runtime 1500 tags

WebAccess/HMI

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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