Overall Equipment Effectiveness Solution

iFactory/OEE

Features

Rapid configuration of OEE solution
- Domain focused edge gateway
- Easy configuration software tool

Intelligent platform improves machine availability
- Customized graphic platform
- Open database table schema

Easy data management to optimize production efficiency
- Standard availability indicator dashboard
- Open API connecting to MES/ERP

Introduction

Many manufacturers find it hard to identify those specific losses that contribute to low machine productivity as they are difficult to identify, record, and analyze, so manufacturers are looking for support in making the move toward smart factory transformation. To realize Industry 4.0 does not have to necessitate a major infrastructure overhaul that costs a lot of money. With Advantech's iFactory Solution Ready Package (SRP) that combines hardware and software into integrated industrial applications, manufacturers can adopt a step-wise approach to realizing their intelligent factory. For system integrators, iFactory SRP provides a cost-effective approach to expediting project development with value-added applications that meet the criteria of Industry 4.0.

Overall Equipment Effectiveness (OEE) solution, one of the most vital iFactory SRPs, realizes intelligent factory through data acquisition, aggregation, and analysis of machine availability to improve productivity, reduce loss, and increase profit.

Key Functions

Availability, Performance and Quality

OEE application software is embedded with standard dashboards showing availability, performance, and quality management, which allows detailed monitoring.

Error Trend Analysis

Standard machine and quality errors can be recorded in different categories for trend analysis. This also allows users to customize the dashboards for different on-site production conditions.
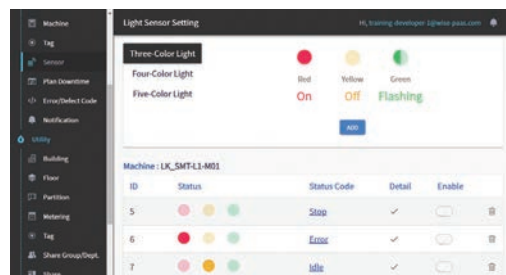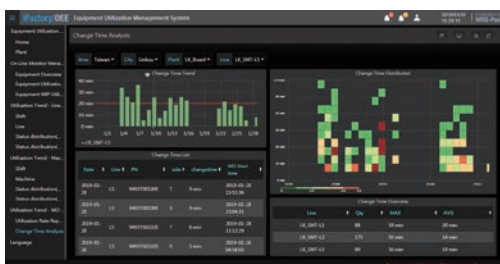

Changeover Efficiency Management

Average changeover times can be calculated to analyze daily efficiency. To understand the differences, accurate scheduling changeovers at precise times can improve operation efficiency.

Tower Light Configuration

The tower light sensor graphical UI is an easy to set up and configure GUI. With it you can simplify tower light condition acquisition and monitoring.

Selection of OEE Computing Service

OEE Enterprise Server

iFactory/OEE

WebAccess/SCADA

ME edge - Shop

iFactory/OEE

WebAccess/SCADA

ME edge - Line

iFactory/OEE

WebAccess/SCADA

ME Edge - Cell

iFactory/OEE

WebAccess/SCADA

Solution Ready Package		Enterprise Server	ME edge -Shop	ME edge - Line	ME edge - Cell
SRP Software	Operation System	Windows server 2019	Windows 10	Windows 10	Windows 10
	Office	MS Office 2019	N/A	N/A	N/A
	SCADA	WebAccess 8.4			
	Container Tech	Docker Desktop for Windows Stable; Edition 2.0			
	Database	Postgre SQL Version 11 & Mongo Version 4			
	Customized Graphic Platform	WISE-PaaS/Dashboard			
	Browser	Support HTML5 Browser (Recommend Google Chrome)			
	Language	Chinese / English			
On-Premise Carrier	SCADA Maximum Communication Linkage	Unlimited	5000	1500	300
	OEE Device Linkage	2000	200	50	5
	Data Retention Period	10 years	1 year	1 year	1 year
	Hardware Platform	HPC-8212	MIC-7700H	MIC-7700H	MIC-7700H
	CPU	Intel Scalable XEON 2.1G 11M 8Core Silver	Intel Core 2.9G 8M 4Core i7-7700T	Intel Core 2.3G 6M 4Core i5-7500TE	Intel Core 2.3G 6M 2Core i3-7101E
	Memory	32G DDR4	32G DDR4	16G DDR4	16G DDR4
	Storage	4T SAS HDD *4pcs by Raid5 C drive: 2T / D drive: 10T	C drive: 128G SSD D drive: 1T SSD	C drive: 128G SSD D drive: 512G SSD	C drive: 128G SSD D drive: 128G SSD
	PSU	550W redundant PSU	150W Adapter	150W Adapter	150W Adapter
	I/O & Port	RJ45 x 2 VGA x 1 HDMI x 1 USB x 2 COM x 1	RJ45 x 2 VGA x 1 HDMI x 1 USB x 8 COM x 4	RJ45 x 2 VGA x 1 HDMI x 1 USB x 8 COM x 4	RJ45 x 2 VGA x 1 HDMI x 1 USB x 8 COM x 4
	Remote Hardware Control	Support IPMI	Support Device On	Support Device On	Support Device On
	Certification	CE / FCC	CE / FCC / UL / CCC	CE / FCC / UL / CCC	CE / FCC / UL / CCC

Ordering Information

OEE Enterprise Server

Description	Part Number
OEE Enterprise Server	SRP-IFS250-H82F01A
Power Cord UL 10A 125V 180cm	1702002600
Optional CPU (Scalable XEON 2.1G 11M 8Core Silver)	96MPXE-2.1-11M36
Optional CPU Cooler	1960081603N001
Optional DDR4-2666 REG Memory (16GB)	96D4-16G2666ER-MI
Optional SAS HDD (4TB)	XCON-ST4000NM0025

ME Edge – Shop

Description	Part Number
ME edge – Shop	SRP-IFS250-M77F03A
Power Cord UL 10A 125V 180cm	1702002600
Optional DDR4-2400 Memory (16GB)	AQD-SD4U16N24-SE

ME edge - Line

Description	Part Number
ME edge - Line	SRP-IFS250-M77F02A
Power Cord UL 10A 125V 180cm	1702002600
Optional DDR4-2400 Memory (16GB)	AQD-SD4U16N24-SE

ME edge – Cell

Description	Part Number
ME edge - Cell	SRP-IFS250-M77F01A
Power Cord UL 10A 125V 180cm	1702002600
Optional DDR4-2400 Memory (16GB)	AQD-SD4U16N24-SE

OEE Additional License

Additional Device License	P/N
Additional 1 devices	32OTDISF0005A0
Additional 10 devices	32OTDISF0006A0
Additional 30 devices	32OTDISF0007A0
Additional 100 devices	32OTDISF0008A0