

iFactory/ Intelligent All-in-One



Features

- Bridge IT/OT data in one architecture
- Easy configuration and plug-in dashboard for data analysis
- Application-based solution for rapid implementation
- Complete scalability – unlimited browser end points
- Extend applications and connect to a 3rd-party factory system
- Powerful context-aware production interface
- Easy-to-use Industrial IoT configuration software
- Comprehensive visualization panels and graphics library
- Web & mobile phone user interfaces with customized notifications

Introduction

The iFactory Intelligent All-in-One solution stands out for its unique capabilities. Advantech provides an All-in-One solution that is easy to understand and operate. It offers much more than just a visual dashboard. It seamlessly connects people, applications, and machines across different locations. By consolidating all the data you need in one place, it simplifies the monitoring and management process. Most importantly, it helps improve production efficiency by turning data into actionable steps.



Going Paperless

Our solutions relieve the burden of preparing paperwork by providing digital workspaces with help at the touch of a button.



Quick Response

Our solutions help your operators spot problems quickly and easily, take impactful decisions, streamline processes, and enhance the quality of your products.



Future Expansion

Our solutions are developed with long-term thinking. They can be extended to iFactory modular I.Apps and can easily integrate with third-party systems.

Key Functions



Digital Workspace

This solution provides workers with a user-friendly interface to digitalize production data, with a focus on enhancing efficiency and resolving production bottlenecks.

Key processes include:

- Work orders
- Job reporting
- Event reporting
- Process guidance
- Parameter guidance



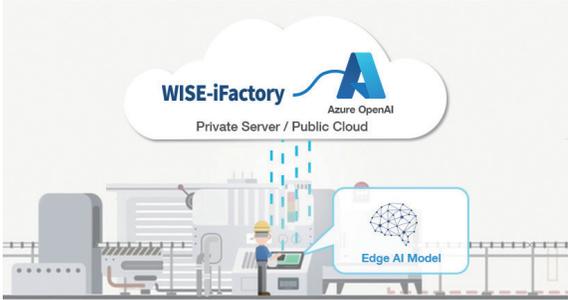
Production Monitoring

The solution provides an instant plug-in dashboard together with mobile services. The dashboard helps line operators, managers, and supervisors translate complex data into useful information anytime, anywhere.

Dashboards include:

- Machine Overview
 - Single Machine Performance Statistics
 - Machine Overview Alarm
 - Single Machine Alarm
 - Energy Consumption Data
 - Production Lead Tim
- *Custom pages for developers

iFactory/Intelligent All-in-One



Data Hub Configurations

This solution provides powerful IIoT data acquisition services, enabling users to quickly access and deploy IIoT engineering.

Key functionalities include:

- Basic settings
 - User management
 - Event notices
 - iMobile services
 - Command Center
- Edge IoT
 - Enabler

Edge AI Model

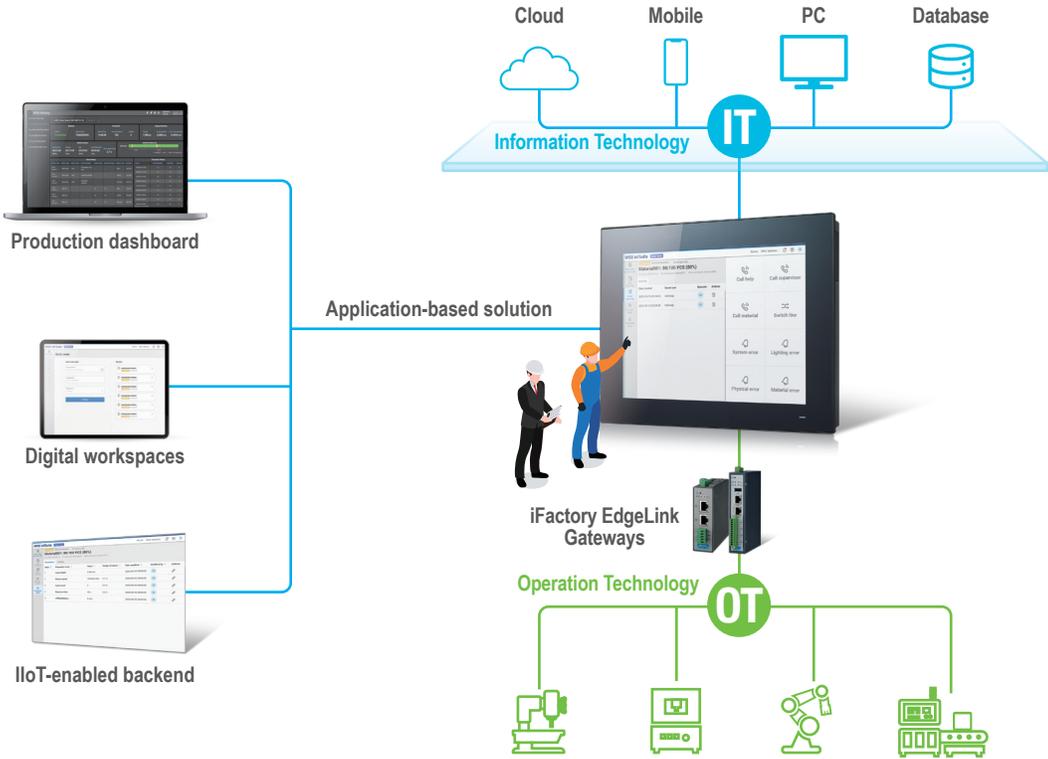
Edge AI models minimize downtime risks and quality issues. Diagnostics can be instantly responded to by Azure Open AI/WISE-iFactory iApps.

AI features include:

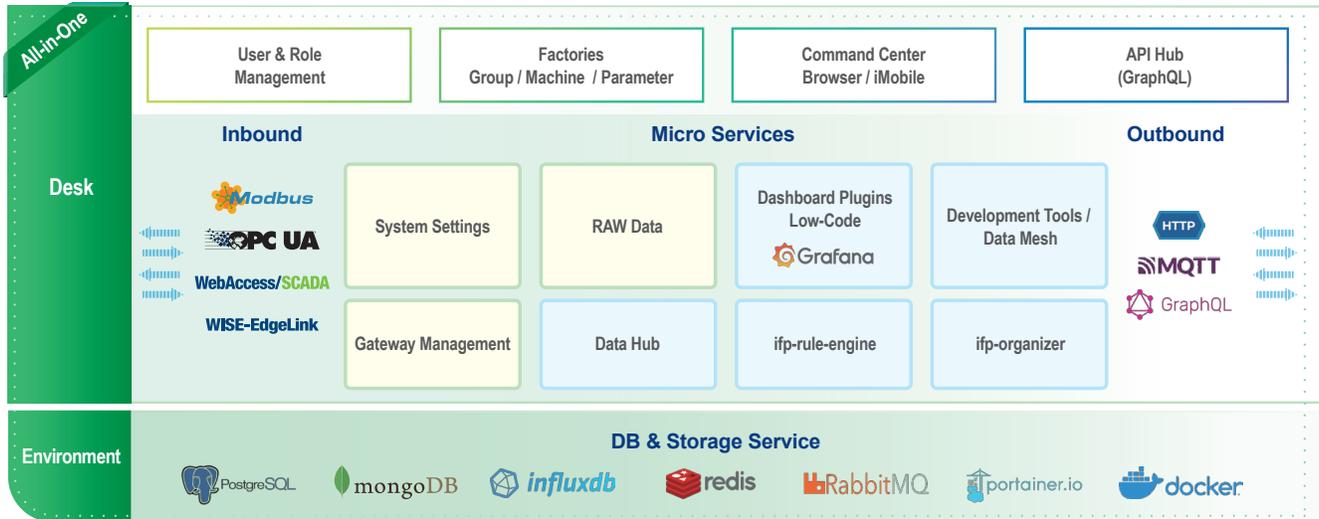
- Plug-in algorithms & neural networks with powerful edge AI functions.
- Azure OpenAI can diagnose production issues without site visits.
- WISE-iFactory I.Apps are highly connected to intelligent all-in-one edge devices for extensive services.

*Optional purchase on request

Application Architecture



Software Architecture



Selection of Intelligent All-in-One

Solution Ready Package	15" XGA Intelligent All-in-One (TPC-315, WinOS)		
Part Number	IFS-RTM-T315W3A	IFS-RTM-T315W4A	
SRP Software	OS	Windows 10	
	Software	Preprocess 100 tags/5s (suggested)	Preprocess 500 tags/5s (suggested)
	Container Tech	Docker on Ubuntu	
	Database	InfluxDB Version 1.8 & MongoDB version 4	
	Customized Graphic Platform	WISE-PaaS/Dashboard (Dashboard Edge plan with multi-language)	
	Browser	Supports HTML5 browser (recommend google chrome)	
SRP Hardware	Hardware Platform	TPC-315	
	Panel cutout dimensions	306.1 x 230.1 mm (12.05 x 9.06 in)	
	CPU	Intel® Core™ i3-8145UE 2.20GHz	Intel® Core™ i5-8365UE 1.60GHz
	Memory	8G*2 DDR4	
	Storage	128G M.2 SATA3 SSD	128G M.2 SATA3 SSD
	Power Supply Unit	120W adapter	
	I/O & Port (Direction: Horizontal)	2 x RS-232/422/485	
		1 x USB 2.0	
		4 x USB 3.2 (Gen 2) 1 x iDoor slot 1 x Display port (Video output) 1 x Audio line out/ mic in	
Expansion	1 x M.2 M key 2280 (SATA or NVMe PCIe x4) 1 x 2.5" SSD/ HDD (SATA, Max. 7mm) 1 x Full-size mini PCIe		
Certifications	BSMI, CCC, CE, FCC Class A, CB/UL		

Ordering Information

Part Number	Description
IFS-RTM-T315W3A	TPC-315/15"/i3/16G/128G/Win10/RTM preprocess 100 tags
IFS-RTM-T315W4A	TPC-315/15"/i5/16G/128G/Win10/RTM preprocess 500 tags

Optional Accessories

Part Number	Description
1702002600	Power Cord, 3-pin, 10A 125V, 1.8 M, UL type
1702031801	Power Cord, 3-pin, 10A 125V, 1.8 M, UK type
1702002605	Power Cord, ENEC 3-pin, 10A 250V, 1.8 M, EU type
1700000596-11	Power Cord 10 A 250V 1.8 M, China/Australia type

Selection of Intelligent All-in-One

Solution Ready Package	15" XGA Intelligent All-in-One (PPC-415, WinOS)			
Part Number	IFS-RTM-P415W3A	IFS-RTM-P415W4A	IFS-RTM-P415W5A	
SRP Software	OS	Windows 10		
	Software	Preprocess 100 tags/5s (suggested)	Preprocess 500 tags/5s (suggested)	Preprocess 500 tags/5s (suggested)
	Container Tech	Docker on Ubuntu		
	Database	InfluxDB Version 1.8 & Mongo version 4		
	Customized Graphic Platform	WISE-PaaS/Dashboard (Dashboard Edge plan with multi-language)		
	Browser	Supports HTML5 browser (recommend google chrome)		
SRP Hardware	Hardware Platform	PPC-415		
	Panel Cutout Dimensions	382 x 303 mm (15.03 x 11.92 in)		
	CPU	Intel® Core™ i3-1115G4E 2.20 GHz	Intel® Core™ i5-1145G7E 1.50GHz	Intel® Core™ i7-1185G7E 1.8GHz
	Memory	16G DDR4	16G DDR4	16G DDR4
	Storage	128G M.2 SATA3 SSD	128G M.2 SATA3 SSD	128G M.2 SATA3 SSD
	Power Supply Unit	90W adapter		
	I/O & Port (Direction: Vertical)	5 x Serial ports: 2 x RS-232, 1 x RS-422/485 with 1K VDC isolation, 2 x RS-232 (on right side optional) 4 x USB 3.2, 1 x USB2.0 (optional) 1 x Line-Out, 1 x Mic-In 1 x HDMI 1.4 1 x DisplayPort (1.2)		
	Expansion	1 x SODIMM DDR4 3200, Max. 32GB of each slot 1 x M.2 2242/2280 M Key slot for Storage(SATA or NVME PCIe) 1 x M.2 2230 E Key slot for wireless card 1 x M.2 3042/3052 B key slot for 4G/5G module (PCIe or USB2.0) 1 x PCIe x 4 (Default); 1 x PCI (in the accessory box)		
	Certifications	CE / FCC / UL / CCC		

Ordering Information

Part Number	Description
IFS-RTM-P415W3A	PPC-415/15"/i3/16G/128G/Win10/RTM preprocess 100 tags
IFS-RTM-P415W4A	PPC-415/15"/i5/16G/128G/Win10/RTM preprocess 500 tags
IFS-RTM-P415W5A	PPC-415/15"/i7/16G/128G/Win10/RTM preprocess 500 tags

Optional Accessories

Part Number	Description
1700001524	Power cable 3P UL 10A 125V, 180 cm
170203183C	Power cable 3P Europe (WS-010+083) 183 cm
1700008921	Power cable 3P/3P power supply 1.8M PSE
96CB-POWER-B-1.8MB	Power code 3P CCC(China) 1.8M
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-STAND-A1E	Stand for PPC series
PPC-ARM-A03	ARM VESA Standard for PPC series
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna