

# RT-edge

## ■ Feature

A High-Performance platform “RT-edge” can process data from the sensor and PLC in real time in milliseconds.

It is composed of one general industrial computer and integrated the functions required for edge computing, so you can get merits such as reduction of hardware cost / improvement of processing throughput / improvement of maintainability / and so on.

You can select scalable system of edge computer from minimum to maximum component, and control production information and analyze the data over the internet by adding OPC UA server.

## ■ Function

### Real-time control

It can be controlled in real-time by our software PLC “INplc” (based on international standard level IEC 61131-3) or C language. Control cycle is so fast as 0.1ms at fastest.

### Transaction trace

Traced information can be controlled and saved for maintenance and quality of production. For example, it is very useful for your quality control to record the lot No. and serial No. and inspection result at that assembling moment.

### Data acquisition

You can collect data from various equipments and PLC and sensor through various standard interface ( LAN, Serial, various fieldbus, etc) for the industrial use.



- Production line monitoring
- Production data(quality, results)
- Analysis result data

### Large-capacity database

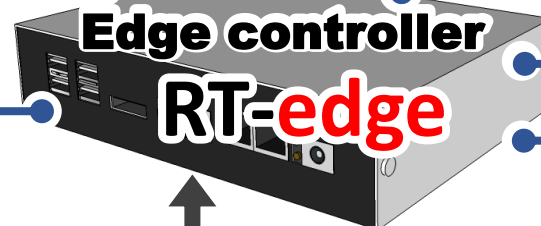
Collected data is saved to large-capacity storage (SSD, HDD, etc) so you can build a system to control relational DB (SQL Server, Oracle, etc).

### Data analysis

Collected data can be analyzed by using commercial or customized software, and that feedback can be sent to the equipment, and also to cloud service.

### Hardware

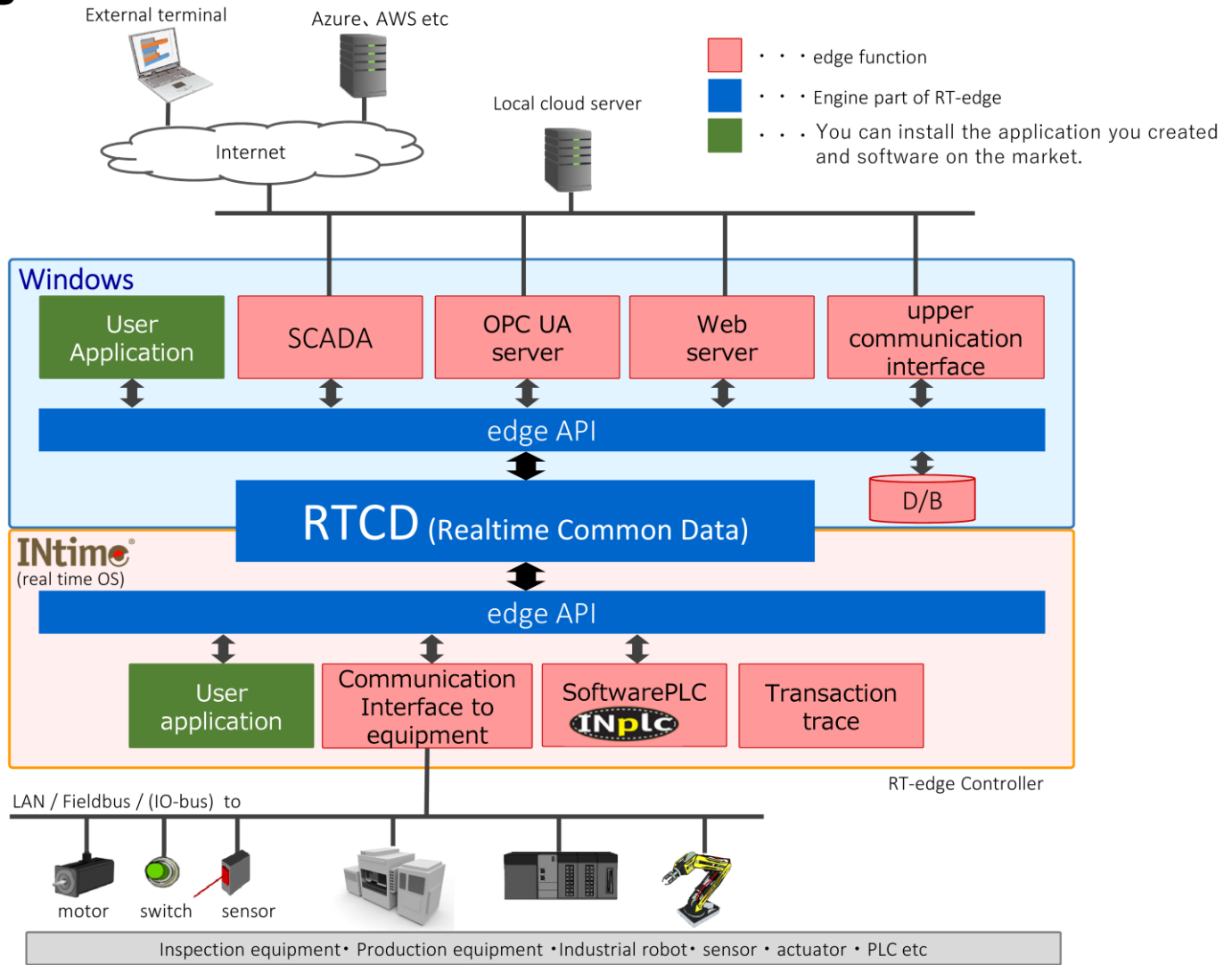
The hardware is general industrial computer which is so reliable and environment resistant. You can choose and adopt the best one for you among the PCs of various computer makers, by yourself.



LAN / Fieldbus / (IO-bus) to



# Internal block diagram



## API list

Function	API name	Win	INtime	INplc
RTCD read	iotReadRtData	●	●	●
	iotReadRtDataById	●	●	●
RTCD write	iotWriteRtData	●	●	●
	iotWriteRtDataById	●	●	●
Acquisition of device information	iotGetDeviceSetting	●	●	●
	iotGetMyDeviceSetting	●	●	●
Device information setting	iotSetDeviceSetting	●	●	●
FTP upload	iotSendFtp	●	●	
FTP download	iotReceiveFtp	●	●	
Communication between process	iotSendMessage	●	●	●
	iotReceiveMessage	●	●	●
	iotGetProcessInfo	●	●	●
Recard of traced log	iotWriteSystemLog	●	●	●
Acquisition of error code	iotGetLastError	●	●	●

## Specification

Software PLC 	PLC control		Based on IEC61131-3
	PLC programming language+ 1		LD, FBD, IL, ST, SFC + C language
	Task	The number of the practice tasks	5~16task(OPTION)
		Control cycle	Fastest 0.1msec~
Maximum number of steps		32K steps	
Communication interface between equipment	Field bus		EtherCAT®, FL-net, CC-Link, CC-Link IE, EtherNet/IP, PROFIBUS, PROFINET
	Ethernet		TCP/IP
	PLC communication		MELSEC Q series (Ethernet)
	Direct I/O		Digital I/O, Analog I/O
Data analysis		Commercial or your customized data analysis software	
Data base		SQL Server / Oracle / MySQL Other DB which is connectable to ODBC	
Transaction trace	Application trace		Trace information which OEM or end user record for control of quality and production and maintenance.
	System trace		Trace information which is record for system maintenance
Internet interface	Cloud service		OneDrive / Azure / AWS / Google Cloud
	Others		Windows filesharing / FTP / mail
OPC UA server	Connection		INtime / INplc / MELSEC(Q)
SCADA		Commercial HMI and SCADA software	

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