EIS-D210

Wireless Connectivity Edge Intelligence Server

NEW

DeviceOn iEdge

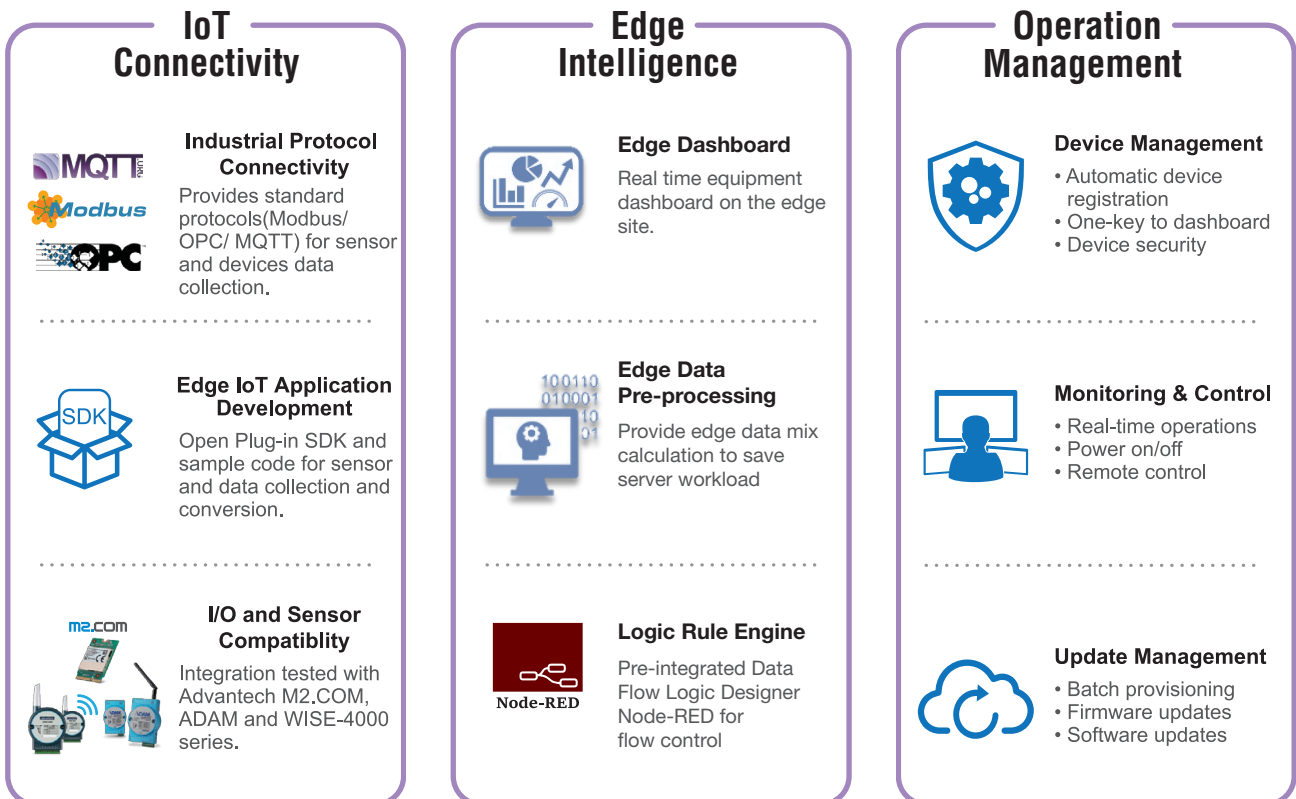**DeviceOn/iEdge**

Features

- Integrated hardware plus software to build up edge-to-cloud applications
- Pre-configured system: Intel® Celeron® N3350/E3940 SoC, Win 10 Ent with 4GB Memory, 64 GB SSD and wireless networking
- Pre-integrated software package: WISE-DeviceOn, WebAccess/SCADA and iEdge for equipment connectivity
- Pre-configured Microsoft Azure service: Device Management Package/ Data Intelligence Package (Optional)
- Pre-configured AWS service: Connect & Collect Package (Optional)
- Comprehensive developer tools and documents: Node-RED data flow logic designer, dashboard builder, protocol plug-in SDK & configuration tools

intel IoT Solutions Alliance Premier | Microsoft | aws | CCC | CE | FCC | RoHS COMPLIANT 2002/95/EC

Introduction

To fulfill customer requirements in equipment connectivity, data visualization, and predictive maintenance applications, Advantech offers the EIS-D210 Edge Intelligence Server, which is equipped with an Intel® Celeron® Processor N3350 and comes integrated with AWS Greengrass and Microsoft Azure IoT Edge, thus ensuring that IoT devices can respond quickly to local events, interact with local resources, operate with intermittent connections, and minimize the cost of transmitting IoT data to the cloud. In addition to supporting field protocols (MQTT/OPC/Modbus) for sensor/device data acquisition, the EIS-D210 can be used with the Advantech IoT SDK for wireless sensor (Wi-Fi, Bluetooth, LoRa) data integration. Furthermore, the EIS-D210 comes pre-integrated with Advantech's DeviceOn/iEdge software solution, allowing users to incorporate sensor data aggregation, edge analytics, and cloud applications for fast and easy real-time operational intelligence. EIS-D210 provides a range of connectivity options with excellent data handling and networking connection capabilities for various IoT applications.

Solution Block Diagram

IoT Connectivity

Industrial Protocol Connectivity

Provides standard protocols(Modbus/ OPC/ MQTT) for sensor and devices data collection.

Edge IoT Application Development

Open Plug-in SDK and sample code for sensor and data collection and conversion.

I/O and Sensor Compatiblity

Integration tested with Advantech M2.COM, ADAM and WISE-4000 series.

Edge Intelligence

Edge Dashboard

Real time equipment dashboard on the edge site.

Edge Data Pre-processing

Provide edge data mix calculation to save server workload

Logic Rule Engine

Pre-integrated Data Flow Logic Designer Node-RED for flow control

Node-RED

Operation Management

Device Management

- Automatic device registration
- One-key to dashboard
- Device security

Monitoring & Control

- Real-time operations
- Power on/off
- Remote control

Update Management

- Batch provisioning
- Firmware updates
- Software updates

ADVANTECH | **Fanless Embedded Box PCs**

Cloud Integration

Microsoft Azure Cloud Services

Pre-configured with Azure Kubernetes services to quickly integrate with other cloud modules and shorten development effort.

Microsoft Azure

Cloud Connectivity

Azure IoT Edge / Plug and play certification and AWS Greengrass certification

Azure   aws

Edge Cloud

Edge Cloud (EIS-S230) provides a scalable data management platform with Kubernetes open standard environment

IoT Development Tools

Node-RED Utility	Pre- integrated logic edit tool Node-RED
Data Collection	Receive Data to Agent and transfer to WISE-PaaS/RMM server
Data Conversion	Conversion data protocol to MQTT with JSON format
Plug-in SDK	Agent and protocol conversion plug-in SDK for developer
GUI Protocol Config Tool (for Modbus)	Provide Modbus GUI for quick configuration
Back-up and System Recovery	Acronis Hot back-up/ Recovery/ Hot-Key recovery
Security	McAfee white list protection
Remote Update (OTA)	Software(Advantech & 3rd party) update
Zero Downtime	Reserve edge data when lost connection and recover it when the connection is back
Light Analytic	Statistics and graphical representation of historical data
Dashboard Builder	Customizable dashboard to display sensor data with text, spark line, gauge, etc. types of widgets

**Support depends on device type, OS and account permission.

Dimensions

Unit: mm

94.20

133.00

46.40

94.20

133.00

83.60