# **EIS-D120**



## Multiple I/O Edge Intelligence Server

## **Features**

- Multiple I/O offerings and iDoor technology support
- Integrated hardware plus software helps build up edge-to-cloud applications
- Pre-configured system: Intel<sup>®</sup> Celeron<sup>®</sup> J1900 SoC, WES7E/Win 10 with 4GB Memory, 64 GB SSD
- Pre-integrated WISE-PaaS Software Package: WISE-PaaS/RMM, WISEPaaS/ OTA, WISE-PaaS/Security, WebAccess/SCADA, WebAccess/IMM and WebAccess/HMI
- Pre-configured Microsoft Azure service: Device Management Package/ Data Intelligence Package (Optional)
- Comprehensive developer tools and documents: Node-RED data flow logic designer, dashboard builder, protocol plug-in SDK & configuration tools

## Introduction

The EIS-D120, a multiple I/O Edge Intelligence Server (EIS), is an integrated software plus hardware solution for IoT and cloud applications. EIS-D120 offers a readyto-run system (Intel® Celeron® J1900 platform with WES7E/ WIN10 IoT Enterprise) and WISE-PaaS software package, including IoT foundation block WISE-PaaS/RMM, WISEPaaS/OTA, WISE-PaaS/Security and vertical applications: WebAccess/SCADA, WebAccess/IMM, WebAccess/HMI. The user can find more software packages in the Advantech WISE-PaaS Marketplace. For IoT developers, EIS-D120 provides WISE-Agent and a protocol plug-in SDK for IoT data collection and conversion, and built-in Node-RED for smart data processing and logic flow design. It also provides pre-configured Azure packages on WISE-PaaS Marketplace for quick and easy cloud connection. EIS-D120 offers a complete solution for IoT data collection and intelligent solution creation from end device, edge network, to the cloud; multiple I/O interfaces help connect with sensors, devices and other equipment very simply. With it, you can build innovative IoT applications that are easy to integrate.

# **Solution Block Diagram**

WISE-PaaS WISE-Agent IoT Connectivity Built-in WISE-PaaS/RMM WISE-PaaS/OTA **Edge IoT Application Development Remote Software Update** Open Plug-in SDK and sample code for sensor Remote Monitoring and and data collection and conversion. Management Open standard IoT device Remote software update, monitoring and includes 3rd party software management platform (Integration version in WISE-PaaS/RMM) **Data Format Integration** Supports ODBC plug-in for database and data WISE-PaaS/Security WebAccess/IMM integration (file types: CSV, MDB). Interactive Multimedia **Centralized Security** Management Centralized device management, Centralized content editor and Industrial Protocol Connectivity data protection and remote dispatch management for Provides standard protocols(Modbus/ OPC/ back-up and recovery solution interactive multimedia player **lodbus** MQTT) for sensor and device data (Integration version in WISE-PaaS/RMM) collection. WebAccess/SCADA WebAccess/HM ma.com Smart SCADA **Human Machine Interface** I/O and Sensor Compatiblity Data collection and A stand-alone, Integration tested with Advantech M2.COM, graphical interfaces for machine-level HMI to a ADAM and WISE-4000 series. distributed visualization solution supervisory management (Limited version with (Limited version with 16 point access ability) 16 point access ability)

AD\ANTECH

## -Node-RED-

Data Manageability

#### Easy Application Development

Overall 250+ RESTful APIs are provided so application developers can access related functionality and IoT data of WISE-PaaS software.



ZDT

RE-DEPLOYMENT

RESTful API

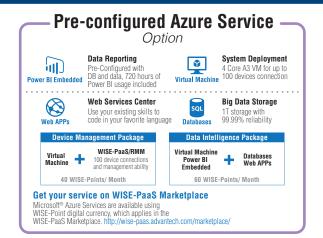
250+

### Smart Data Processing

Pre-integrated Data Flow Logic Designer Node-RED for data processing and flow control (Sample code included).

#### Zero Downtime

Data cache storage for secured data transfer, retain data when connection is lost; forward it after connection is reestablished.



## **IoT Development Tools**

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

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

## **Edge System Specifications**

Processor	Intel® Celeron® J1900 Quad Core 2.0GHz SoC
Memory	4GB bundled
Integrated O/S	WES7E/Win 10
Operating Temperature	-20 ~ 70° C with industrial grade RAM/SSD
I/O Interface	1 x HDMI, 1 x VGA, 2 x GbE LAN, 3 x USB 2.0, 1 x USB 3.0, 2 x RS-232, 2 x RS-422/485, Mic-in, Line-in, Line-out
Power Input	9 ~ 36 V <sub>DC</sub> in
Storage	64GB 2.5" SATA III SSD bundled
Dimensions	264.5 x 68.4 x 133.0 mm (10.41" x 2.69" x 5.24")

## **Ordering Information**

Part Number	CPU	Memory	Storage	0\$	VGA	HDMI	GbE	USB 2.0	USB 3.0	RS-232/ 422/485	Audio	Full-size MiniPCle	Power Input	mSATA	Operating Temperature*
EISD120W1DS641-BTO	Intel Celeron J1900 SoC	4 GB	64G 2.5" SATAIII SSD	WES7E	1	1	2	3	1	4	Line-out, Mic-in, Line-in	1, with SIM holder	9-36 V <sub>DC</sub>	1	-20 ~ 70° C
EISD120E1DS641-BT0	Intel Celeron J1900 SoC	4 GB	64G 2.5" SATAIII SSD	Win 10	1	1	2	3	1	4	Line-out, Mic-in, Line-in	1, with SIM holder	9-36 V <sub>DC</sub>	1	-20 ~ 70° C

\* If industrial grade memory and SSD selected.

## **Packing List**

Item	Description
1	EIS-D120 Edge Computer
2	WISE-PaaS software packages
3	19V/ 65W AC-to-DC Adapter

## **Optional Items**

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 180cm, Europe type
170203180A	Power Cable 3-pin 180cm, UK type
1700008921	Power Cable 3-pin PSE Mark 183cm