

EIS-D150

High-Performance Edge Intelligence Server (EIS)

NEW



Features

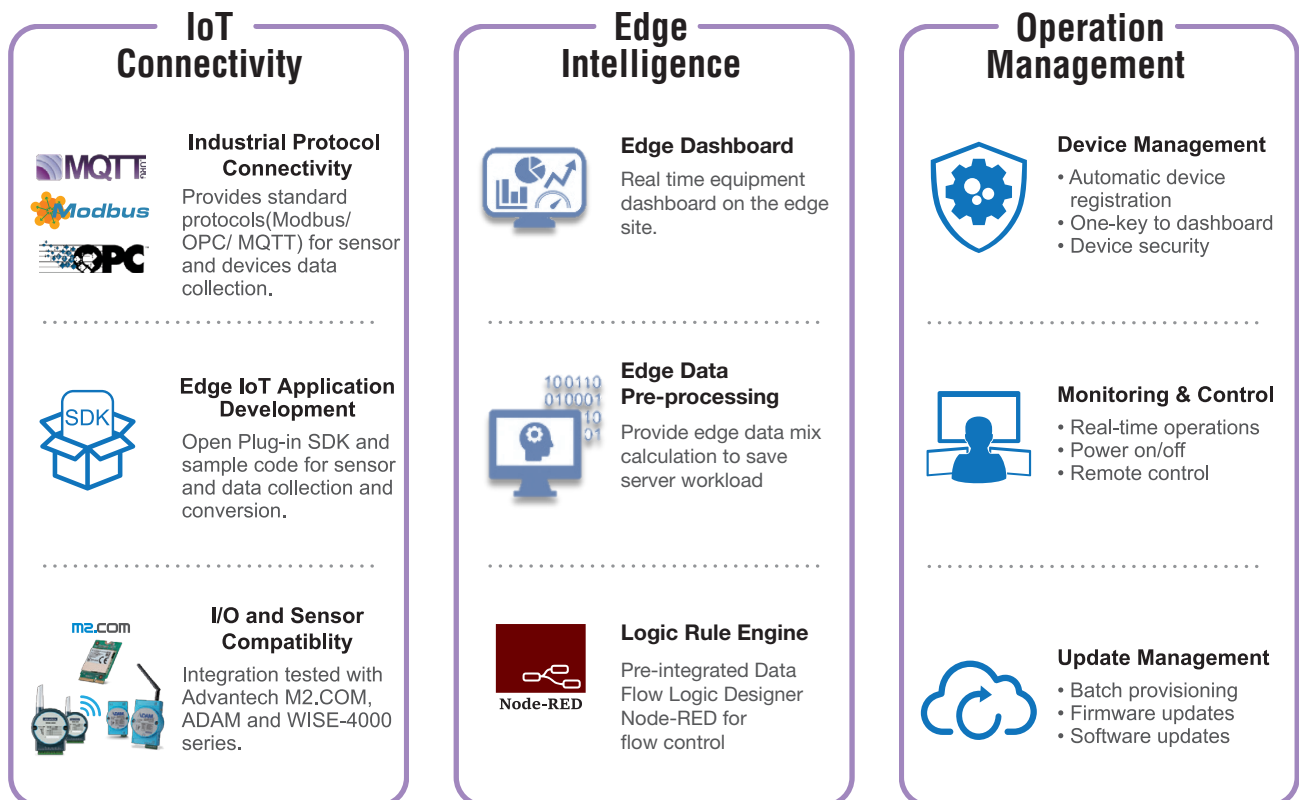
- Integrated hardware and software aids edge-to-cloud application development
- Preconfigured system: High-performance computing powered by 6th Generation Intel® Core™ U-series i5, Win 10 with 8 GB RAM, 256 GB SSD
- Pre-integrated software package: WISE-DeviceOn, WebAccess/SCADA and iEdge for equipment connectivity
- Preconfigured Microsoft Azure service: Device management package/data intelligence package (optional)
- Comprehensive developer tools and documents: Node-RED dataflow logic designer, dashboard builder, protocol plug-in SDK, and configuration tools



Introduction

Advantech's EIS-D150 high-performance EIS is a software/hardware integrated solution offering high computing power for IoT and cloud applications. The unit enables data preprocessing in addition to logic and flow control at the edge of networks. The EIS-D150 comes with a ready-to-run system (6th Generation Intel® Core™ U-series i5 platform with WISE7E/ WIN10 IoT Enterprise) and WISE-PaaS software. It includes the IoT applications WISE-DeviceON, WebAccess/SCADA and iEdge for equipment connectivity. Furthermore, it gives the flexibility to add other software from the WISE-PaaS marketplace. For IoT developers, the EIS-D150 provides WISE-Agent and a protocol plugin SDK for IoT data collection and conversion, as well as a built-in Node-RED for smart data processing and logic flow design. It comes with preconfigured Azure packages from the WISE-PaaS Marketplace for easy and fast cloud connectivity. The EIS-D150 offers a complete solution for IoT data collection and intelligence creation from end devices and edge networks to the cloud. Its high computing power can assist with efficiently managing various types of devices, equipment, and sensors. With this unit, you can accelerate IoT implementation and enable IoT connectivity, data manageability, and analytics in the edge of your network.

Solution Block Diagram



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



Edge Cloud

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

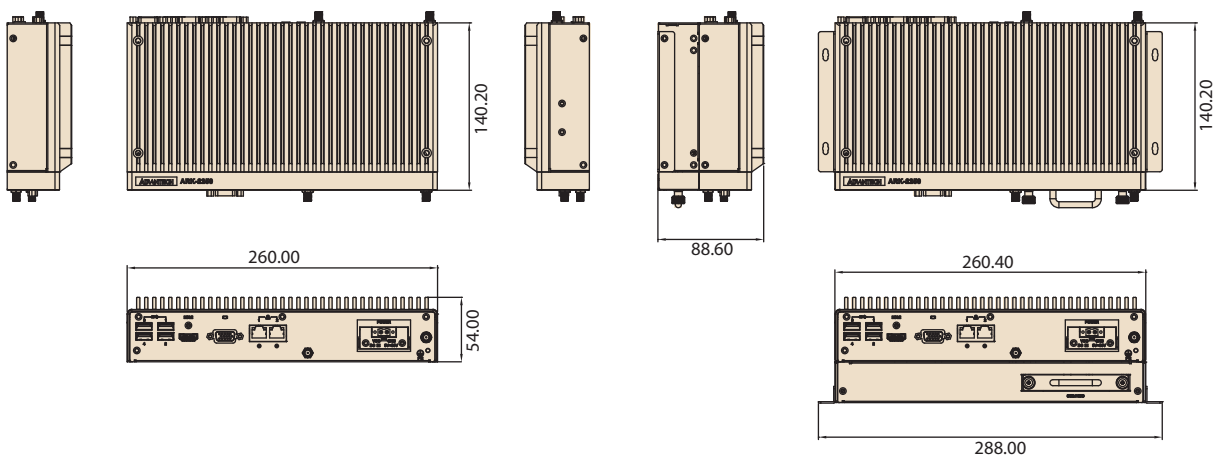
IoT Development Tools

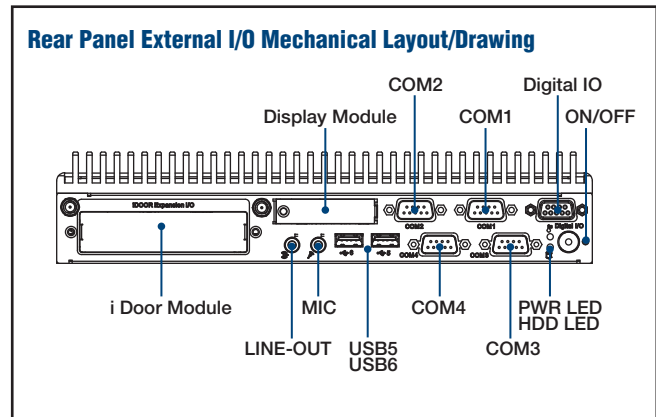
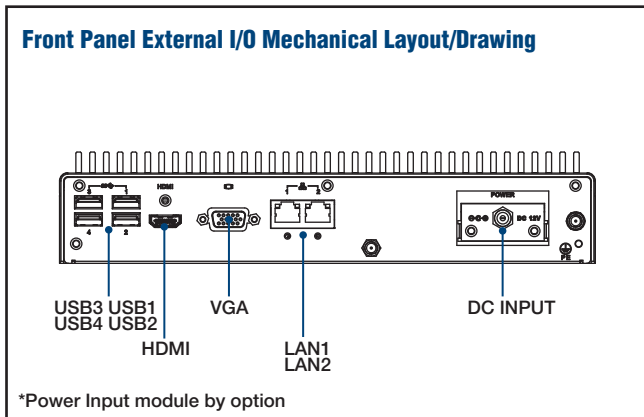
Node-RED Utility	Pre-integrated logic editing tool Node-RED
Data Collection	Receive data from agents and transfer the data to a WISE-PaaS/RMM server
Data Conversion	Convert data protocol to MQTT with JSON format
Plug-in SDK	Agent and protocol conversion plug-in SDK for developers
GUI Protocol Config Tool (for Modbus)	Modbus GUI provided for quick configuration
Backup and System Recovery	Acronis hot backup/recovery/ hot-key recovery
Security	McAfee whitelist protection
Remote Update (OTA)	Software (Advantech and 3rd party) updates
Zero Downtime	Preserve edge data when connections are lost and recover the data once the connections have been restored
Light Analytics	Statistical and graphical representation of historical data
Dashboard Builder	Customizable dashboard with widgets for displaying sensor data in the format of text, sparklines, gauges, and so on

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

Dimensions

Unit: mm





Specifications

Processor System	CPU	Intel Core i5 6300U
	Base Frequency	2.4 GHz (Dual-Core)
	L3 Cache	3MB
	BIOS	AMI UEFI 128 Mbit
Memory	Technology	DDR4 2133 MHz
	Max. Capacity	16 GB
	Socket	1 x 260-pin SO-DIMM
Graphics	Controller	Intel HD Graphics 520
	Graphic Engine	DirectX 11.3, OpenGL 4.4, and OpenCL 2.1 Full AVC/VC1/MPEG2 HW Decode
	VGA	Up to 1920 x 1200 @ 60Hz (No hotplug support)
	HDMI	HDMI 1.4a for HD video playback, 4096 x 2160 @ 24Hz
	Dual Display	Yes, VGA + HDMI
Ethernet	LAN1	10/100/1000 Mbps Intel i219 GbE, support Wake On Lan
	LAN2	10/100/1000 Mbps Intel i210 GbE, support Wake On Lan
	Audio	Interface
TPM		TPM 2.0
IO Interface	Serial Ports	4 x RS-232/422/485 port with auto flow control
	USB Interface	4 x USB 3.0, 2 x USB 2.0
	DIO	8 bit
Other	Watchdog timer	255 levels timer interval, setup by software
Expansion	Mini PCIe	2 x full size Mini PCIe with (CN14 with SIM holder)
	iDoor	1 set (option)
Storage	HDD	Supports one SATA 2.5" HDD Bay (Compatible with 12.5mm height HDD) (Max. Data Transfer Rate 300 MB/s)
	SSD	1 x full size mSATA socket (CN15, shared with mPCIe)
Software Support	Microsoft Windows	Windows 10, Windows 8.1, WES7, Windows 7
	Linux	Support by project
Power Requirement	Power Type	ATX
	Power Input Voltage	12V _{DC} (9-36V as option)
	Minimum Power Input	12 V, 5 A
Power Consumption	Power Adapter	AC to DC, DC12V/5A, 60W (Option)
	Typical	7.8 Watt
Mechanical	Max.	42.8 Watt
	Construction	Aluminum housing
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	260 x 54 x 140.2 mm (10.24" x 2.13" x 5.52")
Environment	Weight	2.3 kg (5.07 lb)
	Operating Temperature	With extended temperature peripherals: -20 ~ 60 °C (-4 ~ 140 °F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 40 °C (32 ~ 104 °F) with 0.7m/s air flow
	Storage Temperature	- 40 ~ 85 °C (-40 ~ 185 °F)
	Relative Humidity	95% @ 40 °C (non-condensing)
	Vibration During Operation	With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
	Shock During Operation	With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class B, CCC, BSMI
Safety Certifications	UL, CCC, BSMI	