

EI-52

Edge Intelligence System with Intel 11th generation with Edge X API and WISE-DeviceOn

NEW



WISE-DeviceOn WISE-Marketplace Azure Certified Device

Features

- Intel 11th gen. Core i5/i3/Celeron
- Pre-integrated Edge X with data acquisition API
- Pre-integrated WISE-DeviceOn for device management and remote control
- 8/16 GB DDR4 Memory Built-in
- 64 GB SATA Slim SSD Built-in
- Compact 156 x 112 x 60mm dimensions
- 4K HDMI and DP 1.4a Dual Display
- Compatible with optional VEGA-330 AI Module supported by Intel Movidius Myriad X VPU
- Compatible with optional AIW-355 5G module
- Intel VNNI support for AI and deep learning

Introduction

Advantech EI-52 is a compact box designed high performance Edge Intelligence system. It is powered by Intel® 11th gen. Core i5/i3/Celeron Processor, with software Edge X API for data acquisition and WISE-DeviceOn for device management and remote control. EI-52 is the ideal ready-to-use edge intelligence solution that generates values from data, device to resource.



Edge-X



Intel 11th Core i5/i3/Celeron Processor

- 2x Performance than previous Gen.
- Outstanding 12 Gen. GFX Graphic Performance
- VNNI instructions for AI/Deep learning performance boost

Edge X API Built-in

- Expandable Data Acquisition API
- Easy for 2nd Development
- Support Azure, AWS, AliCloud

WISE-DeviceOn Built-in

- Device Management and Remote control
- Acronics for system backup and recovery
- Macfee for data and device security

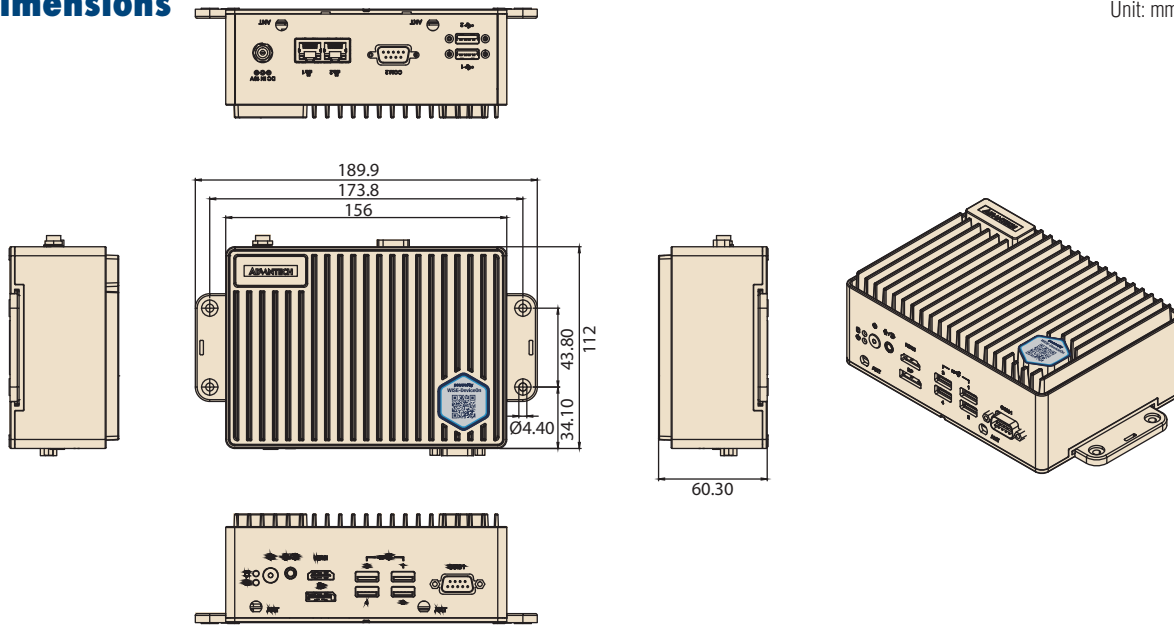
Specifications

		EI-52	Core i3-1115G4E	Celeron 6305E
Processor System	CPU	Core i5-1145G7E		
	System Chipset	Integrated in CPU		
Memory	Technology	Dual Channel DDR4 3200 MHz 260 pin SO-DIMM		
	Capacity	Core i5 SKU: 1x 16 GB 260-pin SO-DIMM DDR4 2400 MHz memory (-20 ~ 85 °C) built-in. Max. capacity 64GB. Core i3 & Celeron SKU: 1x 8 GB 260-pin SO-DIMM DDR4 2666 MHz memory (-20 ~ 85 °C) built-in. Max. capacity 64GB.		
Graphics	Chipset	Intel 12th gen. Graphics		
	Graphic Engine	Direct X 12.1, OpenGL 4.6 HW Encode: H.265/HEVC, H.264/AVC, VP9, SCC HW Decode: H.265/HEVC, H.264/AVC, VP9, SCC		
	HDMI	1 x HDMI 2.0b: 4096x2160@60Hz		
	DP	1 x DP 1.4a: 4096x2160@60Hz		
Storage	Dual Display	HDMI + DP		
	SSD	1 x 64 GB SATA Slim SSD (-40 ~ 85 °C) built-in		
I/O Interface	LAN1	10/100/1000 Mbps Intel i219 GbE		
	LAN2	10/100/1000 Mbps Intel i210 GbE		
	USB 2.0/USB 3.0	2/4		
	Audio	1 x Mic-in, Line-out, Realtek ALC888S HD Audio		
	Serial	2 x RS-232/422/485		
Expansion	Mini PCIe	1 x Full-size Mini PCIe #1		
	M.2	1 x 2280 M key (Signal: PCIe x4 only) #1		
Trusted Platform Module	TPM 2.0	SLB9670XQ2.0		
Power Requirement	Power Input Voltage	19 V _{DC}		
	Power Type	ATX/AT, default ATX		
Power Consumption	Typical	16.5W		
	Max.	34.3W		
Physical Characteristics	Mounting	Wall Mount		
	Dimensions (W x H x D)	156 x 112 x 60 mm		
	Weight	0.94 Kg		
Environment	Operating Temperature	-10 ~ 50 °C, with 0.7m/s air flow		
	Microsoft Windows	Windows 10 IoT 64-bit		
Software Support	Linux	Ubuntu 20.04		
	Others	Advantech Edge X pre-installed in Win10 image WISE-DeviceOn pre-installed in Win10 image		
Certification	EMC	CE/FCC Class B, CCC, BSMI		
	Safety	UL, CB, CCC, BSMI		

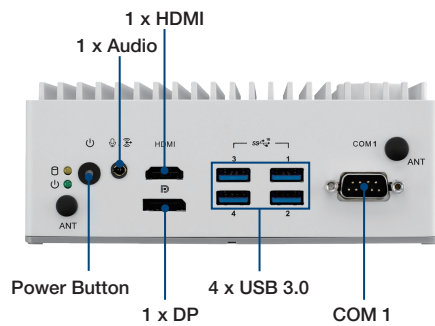
#1 Mini PCIe and M.2 slots are hardware interfaces for wireless communication integration only. System level RF certification is not available.

Dimensions

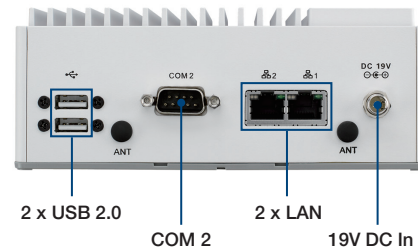
Unit: mm [inch]



Front View



Rear View



Ordering Information

Part No.	CPU	Memory	Storage	Display	LAN	USB	RS-232/422/485	M.2	Mini PCIe	Power Input	Operating Temp.	Audio
EI-52-S6A1	Intel Core i5-1145G7E	16GB DDR4 Built-in	64GB SATA	1 x DP		4 x 3.0		1 x 2280 M key	1 x Full-size Mini PCIe	19 V _{DC}	-10 ~ 50 °C	Realtek ALC888S
EI-52-S2A1	Intel Core i3-1115G4E	8GB DDR4 Built-in	Slim SSD	1 x HDMI	2	2 x 2.0	2					
EI-52-U0A1	Intel Celeron 6305E	8GB DDR4 Built-in	Built-in									

Packing List

Part Number	Description
-	1 x EI-52 unit
-	1 x Power adapter (DC 19V, 90W)
-	1 x User manual (Simplified Chinese)
-	Edge X Package
-	WISE-DeviceOn Package

Embedded OS

Part Number	Description
20706WX9VM0021	Win 10 IoT 64 bit w/ WISE Device-On and Edge X API for Core i5 and Core i3 SKU
20706WX9EM0028	Win 10 IoT 64 bit w/ WISE Device-On and Edge X API for Celeron SKU
20706U20DS0017	Ubuntu Desktop 20.04 LTS 64bit for EI-52 Core i5, i3, Celeron SKU

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
AMK-A0038	VEGA-330 and thermal kit for EI-52 (Including VEGA-330 module and thermal solution)
AMK-A0039	Thermal kit for EI-52+AIW-355 5G module (ready in Q1, 2022) (Please notice that AMK-A0039 only includes the thermal kit, and does not include AIW-355 module.)
AMK-A0040	VESA and DIN-Rail Mounting kit for EI-52
AMO-i026A	MiniPCIe to M.2, support M.2 Key B USB signal module (for using AIW-355 5G module on EI-52)