Eagle Eyes - AIM

6th Generation Intel® Core™ U Series Processor Fanless Box Computer, 4x RJ45 GbE/PoE

Models shown with Optional Antennas Kit

Wi-Fi | DDM | Multi-LAN | Multi-USB | RS-232/422/485 | 4K support | Multi Display Capabilities | Wide Range DC Input 9-36V | Remote Power On/Off Control | Wide Range Operating Temperature

Features

- Wi-Fi and Wireless Communications: 4G, WLAN, GPS, GSM/GPRS, and Bluetooth
- 6th Gen Intel® platform (formerly Skylake), Core™
- Intelligent eKit with AI Function to monitor system status via the DDM
- Special Power Design:
  * Wide voltage 9 - 36V DC input
  * RVP / OVP / UVP / OCP support
  * Surge protection: 80V/1ms
  * Power ignition control
- Easy Expansion and Installation:
  * On / Off power switch with status LED
  * Remote on / off capabilities
  * Easily replaceable RTC battery
  * Two Mini-PCIe interfaces
  * SIM Push-Push sockets

Specifications

System

CPU	6th Gen Intel® Core™ S (formerly Skylake U series), i5-6300U (2/4 Cores, 2.4 GHz/3.0 GHz, 3M Cache, 15W TDP)
Memory	One SO-DIMM DDR4 2133/2400 (32GB Max)
Graphics	Intel® HD Graphics 520
BIOS	AMI 128Mbit SPI BIOS
AI Controller (AIC)	AI for system monitoring and predictive analysis
Watchdog Timer	Runtime: 10 – 65535 seconds Powerup: 120-65535 seconds

Power

DC Input	9 – 36V
Surge Protection	80V/1ms
Power in Protection	Reverse-Voltage, Over-Voltage, Under-Voltage, and Over-Current
Remote Ignition	One ATX power on/off switch, 5-pin terminal block including 3-pin Remote control & 2-pin ignition signals (pitch 3.81mm)
Power Mode	AT/ATX (BIOS setting)

External I/O

Video Ports / Resolution	Two DP / 4096x2304@60Hz One VGA / 1920x1200@60Hz
Video Ports	Two DP + one VGA
USB 3.0 / 2.0	Six USB 3.0 ports via native XHCI controller (0.9A each port)
COM	Two RS-232/422/485 (auto flow control) and two RS-232 port
Wi-Fi / Cellular Communication	Supports Wi-Fi/LTE modules via two Mini PCIe interfaces
Digital I/O	16-bit programmable DIO
Audio	ALC892HD audio codec, Mic-in/Line-out jack
SIM and USIM Socket Support	Two SIM Push-Push sockets – SIM supports 2G USIM supports 3 & 4G
PoE	Four RJ45 GbE (one Intel® i219 + three Intel® i210) PoE+ 802.3at support to 30w

Storage

Internal Drive Bay	One internal SATA port for 2.5" SSD
M.2 Connector	One M.2 M Key 2242 (1 – PCIe or 1 – SATA)

Mechanical

Dimensions (WxDxH)	161(W) mm x 130(D) mm x 68.1(H) mm (6.34" x 5.12" x 2.68")
Weight (net/gross)	1.7kg
Table or Wall Mount	Six anti-slide rubber pads included (Wall Mount optional)
Construction	Aluminum and metal chassis with fanless design
Battery	Easily replaceable RTC battery
Dynamic Display Module (DDM)	0.96" LCM works with AIC to display system status

Other

USB 2.0 Dongle	One Internal USB 2.0 for dongle security key
Antenna	Four Antenna openings
LED	Power status, SSD status, and I/O status

Environment

Operating Temperature	Standard: -20°C - +50°C (-47°F - +122°F) supports 35W TDP CPU Extended temperature: -25°C - +70°C (-13°F - +158°F)
Storage Temperature	-40°C - +85°C (-40°F - +185°F)
Relative Humidity	95% @ +40°C (+104°F), non-condensing
Vibration During Operation	5Gms with SSD (IEC60068-2-64: random 5-500Hz)
Shock During Operation	50Gms with SSD (IEC60068-2-27: Half Sine, 11ms duration)

Certifications

EMC	CE/FCC Class A
Safety Certification(s)	CB

OS Support

Windows	Windows 10 IoT 64-bit
Linux	Linux

Optional Accessories

Wireless Module

Wi-Fi Module	Bointec DPE109A, WLAN 802.11abgn/AC2T2R with BT4.2 mini-PCIe half-size card support
LTE Module	Customer choice based on regional requirements

Cable & Connectors

CBL-S01	SATA (Data + Power) cable x1
TBP5-S03	3-Pin, pitch 5.0mm Female Terminal Block Plug for DC input x1
TBP3-S05	5-Pin, pitch 3.81mm Female Terminal Block Plug for remote connector x 1
TBP3-D20	2x10-Pin, pitch 2.54mm Female Terminal Block Plug for DIO connector x 1

Mounting Kits

WBK-AIH	Wall mount bracket x 2 with Six (6) M3x6 screws

TPM

TPM	Infineon OPTIGA™ TPM SLB 9665 TPM 2.0

Antenna Kits

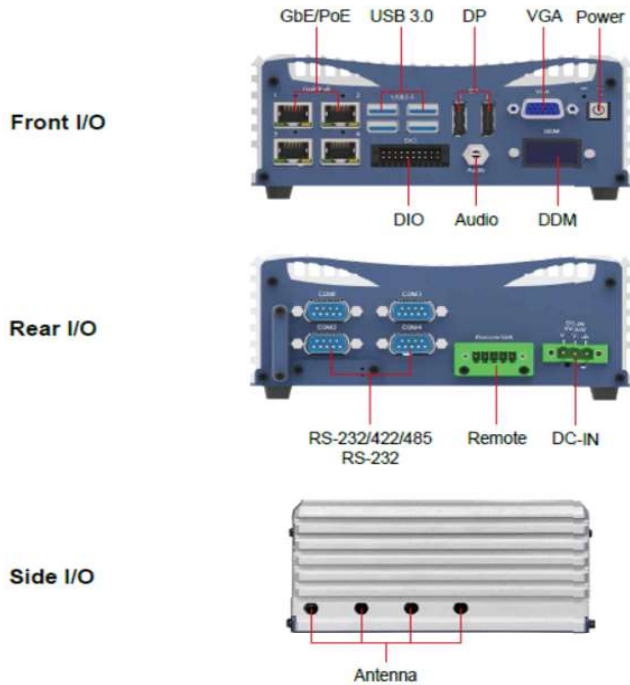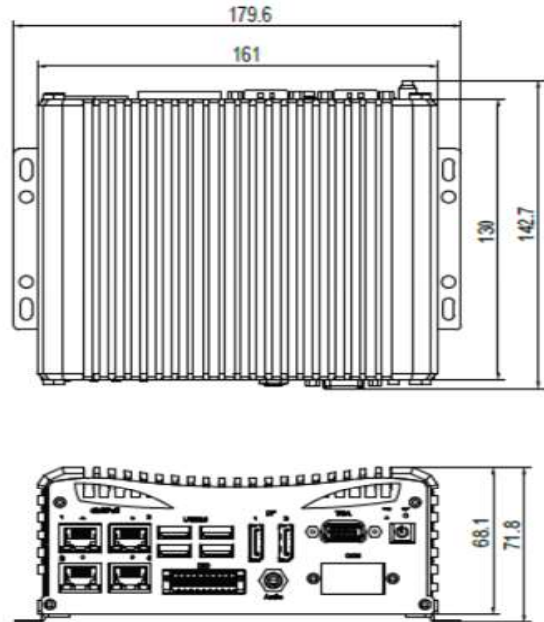|	
20140-000031-A.0	Wi-Fi, one mini-PCIe half to full size adapter bracket, two antennas supporting IPX/MHF to SMA_JR 300 MM, WITH TWO 2.4G RP SMA Plugs (3dB)
2014-000022-A.0	Cellular, two antennas supporting IPX/MHF (Female) to SMA ST Jack (Male), 300 mm, two LTE 704-960/1710-2690MHz SMA ST Plug 2(dB) 50 Ω 161 mm

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I/O Interface

Front I/O

GbE/PoE USB 3.0 DP VGA Power

DIO Audio DDM

Rear I/O

RS-232/422/485 Remote DC-IN
RS-232

Side I/O

Antenna

Dimensions

units: mm

179.6
161
130
142.7
68.1
71.8

Order Information

Part Number

Part Number	Description
AIM6-6300Pi-8G-2.5S128G-P216B12	Intel® 6th Gen Skylake U (SKL-U) platform, Core™ i5-6300U CPU, 2x DP, 1x VGA, 4x USB 3.0, 2x RS-232/422/485, 2x RS-232, 4x GbE/PoE (RJ45), Isolated 8x DI & 8x DO, 8GB RAM, 128GB 2.5" SATA SSD, 160W Power Adapter & Cord.

Packing List

1. Eagle Eyes – AIM Embedded Box PC x 1
2. AC-DC Power Adapter (24V/160W) with pitch 5.0mm 3-pin terminal block plug
3. AC-DC Power Cord YP-12/YC-12, plug type B, American (USA)
4. Six anti-slide rubber pads