



Intel Atom® Processor E3900 Series
15.6" Light Industrial Touch Panel PC



KS156-AL

Atom

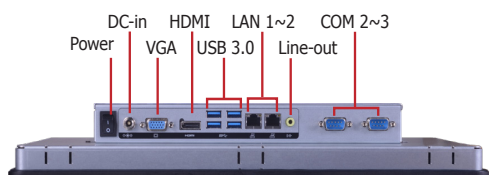


Features

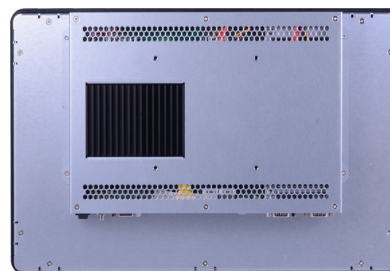
- 15.6" 1366x768 TFT LCD Panel with Touch Screen
- 1x 2.5" SATA drive bay
- IP65 Front Panel Protection
- VESA/Panel Mount
- Rich I/O: 2 LAN, 2 COM, 4 USB 3.0



Panel

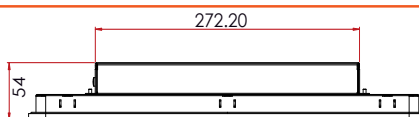


Bottom View



Rear View

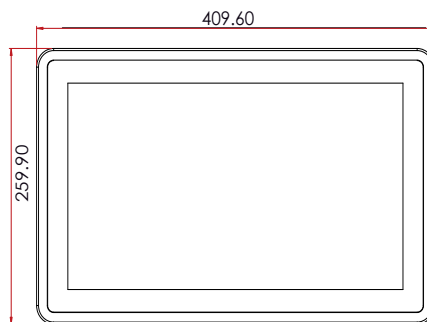
Dimensions



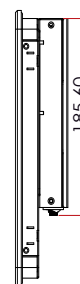
Top View



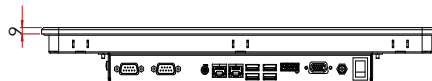
Left View



Front View



Right View



Bottom View



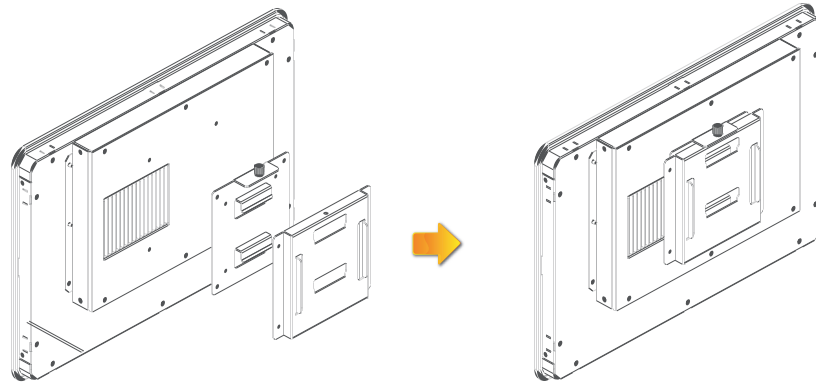
Specifications

SYSTEM	Processor	Intel Atom® Processor E3900 Family, BGA 1296 Intel Atom® x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9.5W Intel® Pentium® Processor N4200, Quad Core, 2M Cache, 1.1GHz (2.5GHz), 6W
	Memory	Two 204-pin SODIMM up to 16GB Dual Channel DDR3L 1867MHz
	BIOS	Insyde SPI 64Mbit
DISPLAY AND TOUCH SCREEN	Display	15.6" 1366x768 TFT LCD Panel with Capacitive/5-Wire Resistive Touch Screen
	Brightness	400 cd/m ²
	Contrast	500:1
	Backlight Lifetime	50,000 hours
GRAPHICS	Controller	Intel® HD Graphics
	Feature	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC HW Encode: AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC
	Display	1 x VGA 1 x HDMI VGA: resolution up to 1920x1200 @ 60Hz HDMI: resolution up to 3840x2160 @ 30Hz
	Dual Displays	HDMI + VGA
STORAGE		1 x 2.5" SATA 2.0 Drive Bay
EXPANSION	Interface	1 x PCIe x1 (Gen 2)
		1 x M.2 1 x Full-size Mini PCIe (PCIe/USB) 1 x SIM Socket
AUDIO	Audio Codec	Realtek ALC888 5.1-channel
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)
LED	Indicators	1 x Power LED
		1 x HDD LED
TOP I/O	Antenna Connectors	2 x Antenna Hole for Wi-Fi or Cell Module
BOTTOM I/O	Ethernet	2 x GbE (RJ-45) (10/100/1000Mbps)
	Serial	2 x RS-232/422/485 (DB-9)
	USB	4 x USB 3.0 (type A)
	Display	1 x VGA
		1 x HDMI
	Audio	1 x Line-out
	Buttons	1 x Power Button
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
POWER	Type	12V DC 15V - 36V DC
	Connector	DC Jack
OS SUPPORT		Windows 10 (64-bit) Yocto Project Fedora 24 (Intel Graphics Driver available) Ubuntu 16.04 (Intel Graphics Driver available)
MECHANISM	Construction	Sheet Metal
	IP Rating	IP65 Front Panel Protection
	Mounting	Panel/VESA Mount
	Dimensions (W x H x D)	409.6 mm x 259.9 mm x 54 mm (W x H x D)
	Weight	TBD
ENVIRONMENT	Operating Temperature	0 to 50°C
	Storage Temperature	-30 to 70°C
	Relative Humidity	5 to 85% RH (non-condensing)
STANDARDS AND CERTIFICATIONS	Shock	OP: Half-sine, 3G @ 11ms Non-OP: Half-sine, 5G @ 11ms
	Vibration	OP: Random, 1Grms @ 5~500Hz, 30min Non-OP: Sweep sine, 3Grms @ 10~500Hz, 30min
	Certifications	TBD

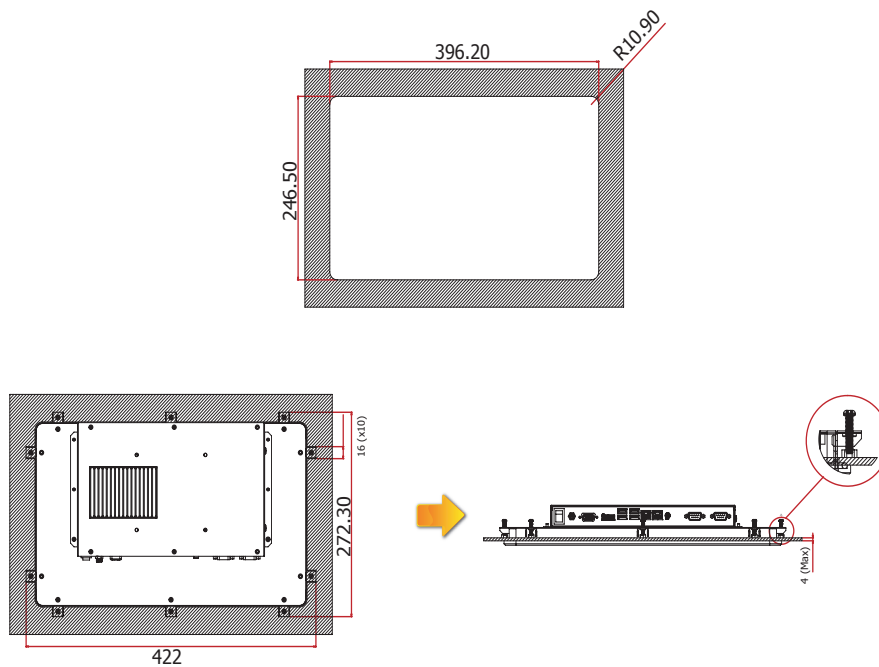


KS156-AL

► VESA Mounting



► Panel Mounting



KS156-AL



► **Ordering Information**

Model Name	Part Number	Description
KS156R-ALDC12-4200	TBD	15.6" Panel PC, AL171, Intel Pentium® N4200, 12V DC-in, 5-Wire Resistive Touch
KS156P-ALWD36-3940	TBD	15.6" Panel PC, AL173, Intel Atom® E3940, 15-36V DC-in, Capacitive Touch
KS156P-ALWD36-4200	TBD	15.6" Panel PC, AL173, Intel Pentium® N4200, 15-36V DC-in, Capacitive Touch

► **Optional Items**

Optional Items	Part Number	Description
mSATA	638-701603-110G	mSATA Card, 16GB MLC, RoHS
	638-703203-100G	mSATA Card, 32GB MLC, RoHS
Memory	138-340001-109G	DDR3L SO-DIMM 204-pin, 4GB
Wi-Fi	761-110091-000G	Wi-Fi kit, RoHS
Power Cord	332-700010-201G	Power cord, Standards (USA), 1.8m, RoHS
Power Adapter	671-106012-000G	60W, 12V/5A, Level 6, RoHS
Panel Mount	TBD	Panel PC Panel Mount Kit, RoHS

► **Packing List**

• 1 KS156-AL Touch Panel PC
• 1 Poron foam
• 1 Chassis Panel Mount Bracket
• 1 Quick Installation Guide

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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