

HPXA0U-21SC-SIEX

21.5" Panel PC with High-performance Intel® Core™ i5 Processor
IECEX/ATEX Zone 2 and UL/C-UL Class I, Division 2 Certifications



Introduction

AIS offers 21.5" 1920 x 1080 FHD, modular panel PCs and touch screen operator interfaces with international certifications and approvals for operation and monitoring in hazardous areas. AIS 21.5" HMI panel PCs are constructed with completely sealed stainless steel type 4/4X, IP 65/66, NEMA 4/4X enclosure with environmental ratings (UL 50 or IEC 529) on the entire system including fully sealed I/O ports. The 21.5" touch panel computer supports wide operating temperatures from -20 to +60°C, comes with pre-installed Windows 10 IoT Enterprise (LTSB), Windows 7 or Linux operating system, and is powered by high-performance and low power consumption (15W TDP) Intel® Core™ i5 processor. AIS offers OSHA's NEC Class I Division 2 (C1D2 or Class I Div 2), Groups A, B, C, D, T4, CENELEC's ATEX 94/9/EC Zone 2, IEC's IECEx Zone 2, Ex nA and Ex ic certification on its Hazardous Locations (Hazlocs) panel PCs and open HMI platforms which are primarily designed for the volatile and harsh environments of oil, gas, chemicals, and oilfield equipment and services.

Specifications

Display	
Size in Inches / Resolution in Pixels	21.5" / FHD, 1920 x 1080
Brightness / Luminance	300 nits / 300 cd/m ²
MTBF of Backlight	LED Backlight up to 50,000 Hours
Touchscreen	Projective Capacitive Touch
System Hardware	
Processor	Intel® Core™ Processor i5-6300U, 3 MB Smart Cache up to 3.00 GHz, 15 W Maximum TDP
Cores / Speed	2 / 2.4 GHz
Memory	On Board 16 GB DDR4
Graphics / Video	Intel® HD Graphics 520
Drives	
Mass Storage	1 x 256 GB 2.5" SATA SSD
Secondary Storage	1 x 64 GB mini PCIe mSATA SSD
Optional Drives	Connection via USB Port
Interface Ports	
Ethernet	2 x M12 8-pin Ethernet TCP/IP - RJ45
USB	1 x M12 8-pin for 2 x USB 2.0
Serial	1 x M12 8-pin COM 1 (RS-232/422/485, Default RS-232)
Graphic	1 x M12 12-pin VGA

Features and Benefits

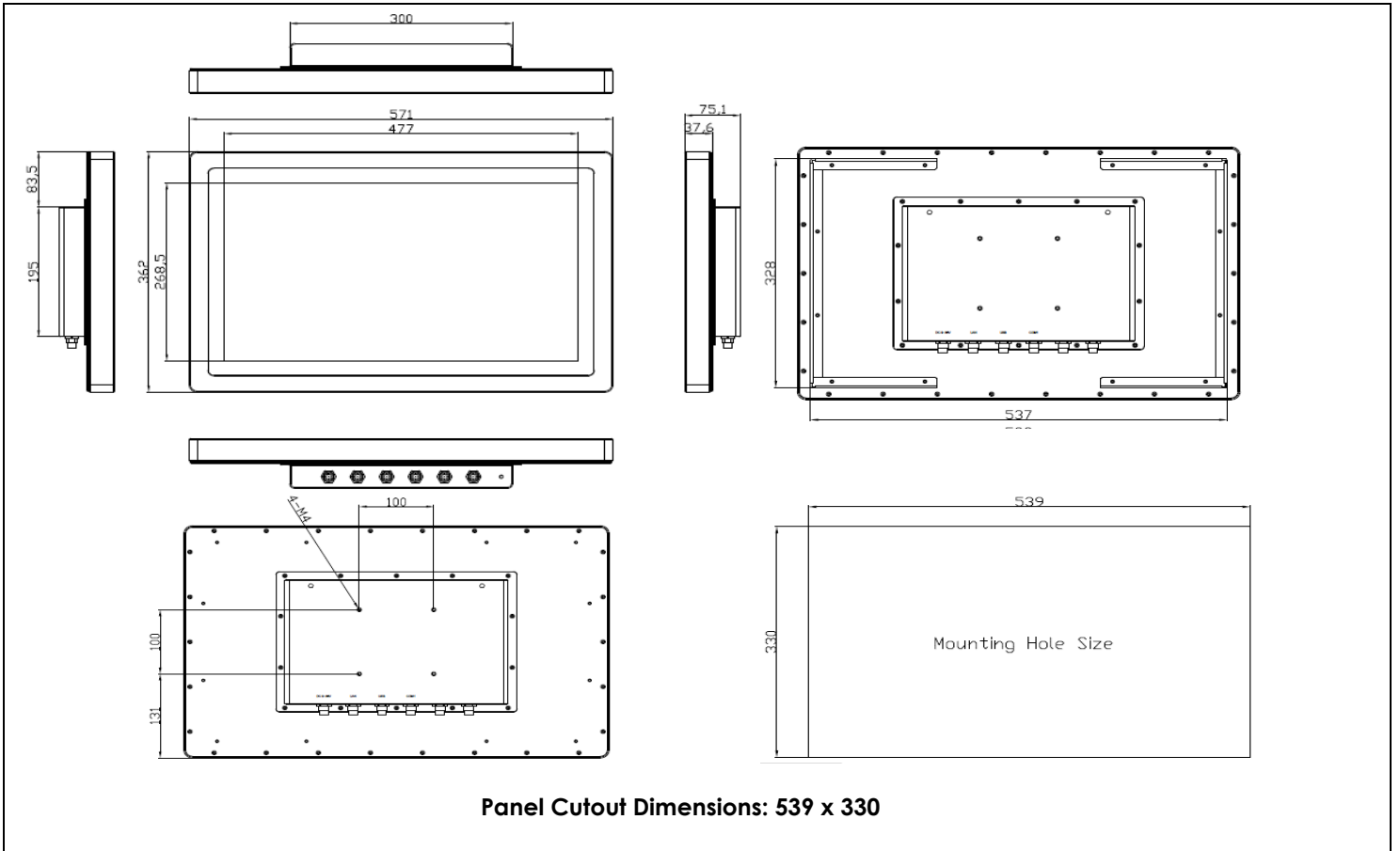
- International Approvals for Use Directly in Hazardous Areas
- Modular Designs for Field-replaceable Displays and Box PCs
- Dedicated Disaster Recovery Drive for Reduced Downtime
- Wide Operating Temperature Range from -20 °C to +60 °C
- IP66 Front, IP65 I/Os, IP66 Protective Stainless-steel Enclosure
- Fanless Designs for Maintenance-free, 24-hour Operation
- 21.5" 1920 x 1080 FHD, Projected Capacitive Touch (PCT/PCAP)
- Intel® Core™ i5-6300U Processor, 3M Cache, up to 3.00 GHz
- 16 GB RAM, 256 GB 2.5" SSD, 64 GB mSATA SSD, 24 VDC Input
- 2 x LAN, 2 x USB, 1 x RS232/422/485, 1 x VGA, M12 Connectors
- Windows 10 IoT Enterprise LTSB or Linux Operating System
- IECEx/ATEX Zone 2 and UL/C-UL Class I, Division 2 Certifications

General Features	
Operation Systems	Windows 7 Professional Embedded Windows 10 IoT Enterprise
Current Supply	1 x M12 3-pin 9-36 V DC
Bezel / Housing	316 Stainless Steel Chassis
Mounting Options	VESA 100 x 100 / Panel Mount
Environment / Ambient Conditions	
Degree of Protection	Front IP66 / NEMA 4X, Rear: IP / NEMA 4
Vibration during Operation	IEC60068-2-64 Compliance: 5 - 500 Hz: 1 Grm
Shock during Operation	IEC60068-2-27 Compliance: 15 gn for 11 ms
Operation Temperature	-20 ~ 60°C (-4 ~ 140°F)
Storage Temperature	-30 ~ 70°C (-22 ~ 158°F)
Relative Humidity	10 to 90% (Non-Condensing)
Compliance Assessments	
US/UL, CAN/CSA	ANSI/ISA-12.12.01-2017, CAN/CSA C22.2 NO. 213-17 UL/CSA 60079-0, UL/CSA 60079-11, UL/CSA 60079-15
Directive 94/9/EC	EN 60079-0:2012/A11:2013, EN 60079-11:2012, EN 60079-15:2010
IECEX	IEC 60079-0:2011 Ed. 6, IEC 60079-11:2011 Ed. 6, IEC 60079-15:2010 Ed. 4
Approvals & Certifications	
United States UL Listed to Safety Standards	Class I, Division 2, Groups A, B, C, D T4 Class I Zone 2, IIC, T4 UL 61010-1
Canada CAN/CSA Listed to Safety Standards	Class I, Division 2, Groups A, B, C, D T4 Class I, Zone 2, IIC, T4 CAN/CSA-C22.2 NO. 61010-1-12 (R2017)
Europe CE Ex Marked to Safety Standards	ATEX II 3 G, Ex nA ic IIC Gc ATEX Zone 2 Category 3 Gas
Dimensions	
Operator Panel / Cut-out	539 x 330 mm (W x H)
Installation Dimensions	571 x 362 x 75.1 mm (W x H x D)
Product Weight	12.9 / 28.4 (kg / lb)
Contractual Warranty	
Period	12 months

HPXA0U-21SC-SIEX

Unit: mm

Dimensions



Ordering Information

Part Number	Description
AIEX-BRK21S	AEX-821 Panel Mount Bracket Cutout Dimensions 539X330
WIN7-PRO/1PK/X64X32	Windows 7 Professional for Embedded Systems (FES)
WIN7-PROEMBSTD	Windows Embedded Standard 7 P
WIN10IOTENT-V	WIN10 IoT Ent LTSB 2016 MultiLang Value (Core i3/i5)

I/O Layout

