HID-2146

21.5” Arrow Lake Medical Panel PC



Product Features

- 21.5" Full HD PCAP touch
- 1 COM, 1 LAN, 1 HDMI, 2 x USB 3.2, 4 x USB 2.0, 1 USB Type C
- 1 x 12V/24V DC output
- 1 x PCI Express [x4] expansion
- Optional capture card, AI card, GPU card, Camera, Noise Cancelling Mic, Backup Battery, Sound Bar integration
- Intel Arrow Lake U Processor
- Optional 5KV isolation 2 USB 2.0, 1 LAN, 1 COM by IET module
- 1x M.2 Type B 2280, 2 x M.2 Type M 2280 for storage, 1 x M.2 Type E 2230 for WIFI
- Imprivata RFID Integration

Specification

System Information	
SBC	HID-2146 Mother Board
Processor	Intel® Arrow Lake U Processors (15W) Intel® Core™ Ultra 5 225U 1.5GHz Intel® Core™ Ultra 7 255U 2.0GHz
System Memory	Two 262-pin DDR5 up to 5600MHz SO-DIMM socket, supports up to 96GB Max
I/O Chipset	IT5782VG
Watchdog Timer	H/W reset, 1sec. – 65535sec./min.1sec. or 1min. step
H/W Status Monitor	CPU & system temperature monitoring and Voltages monitoring
TPM	NuvoTon NPCT750AADYX support SPI TPM 2.0
Platform Controller Hub	Integrated in Processor (SOC)

Expansion

Expansion	1 x PCI Express [x4] 1 x M.2 Key B 2280 for AI card (PCIe x 2) 1 x M.2 Key E 2230 support Wi-Fi module 2 x M.2 Key M 2280 (PCIe x4) for storage

Storage

Other Storage Device	2 x M.2 Key M 2280 (PCIe x4) slot for storage

Audio

Speaker Output	2 x 2W

Ethernet

LAN Chipset	1 x Intel® I226LM
Ethernet Interface	10/100/1000/2500 Base-Tx GbE compatible
LAN Port	1 x RJ-45

Power Requirement

DC Input	+24V
Power Mode	AT/ATX (ATX is default setting)
DC Input Connector	Lockable DC Jack

Software Support

OS	Win11/ Linux

Certification

Certification Information	IEC/EN 60601-1 (Safety), IEC/EN 60601-1-2 (EMC) FCC: Part 15 Class B UL / cUL: IEC/EN/ANSI/AAMI 60601-1 CB Scheme: IEC/EN 62368-1

External I/O

USB Port	2 x USB3.2 4 x USB2.0 1 x USB Type-C (DisplayPort output/PD output 5V/3A, 15W/No PD input)
COM Port	1 x RS-232/422/485
Audio Port	Combo jack
LAN Port	1 x Intel® I226LM
HDMI	1 x HDMI 2.0

Wireless LAN	Optional Intel BE200 802.11abgn+acR2+axR2+be MIMO 2x2 Wi-Fi 7 BT5.4

Panel

LCD Size	21.5"
Resolution	1920 x 1080
Luminance	250 cd/m2
Display Type	Full HD
Pixel pitch	274.5 x 274.5
Contrast ratio	1000
Response time	22 ms
Viewing angle	89(U), 89(D), 89(L), 89(R)
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Controller	USB touch (EETI EXC81H84)
Touch Light Transmission	86%
Backlight	LED

DC In / Out Characteristics

Output Voltage Range	12V/24V

Mechanical & Environmental

Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% relative humidity, non-condensing
Dimension (W x L x H)	520 x 321 x 55 mm
Weight	5.4 kg
IP Rating	Front IP65, Back IP54
Construction - Front	Plastic
Construction - Rear	Plastic
Vibration Test	With SSD/mSATA : 1.5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 30min/axis
Shock Test	With CF/SSD : 10Grms, IEC 60068-2-27, half sine, 11ms
Fanless	Yes
Finishing	Anti-microbial

Component

Adapter	Medical grade Input: 100-240V~, 2.8-0.8A, 50-60Hz Output: 24V 7.5A 180W

Packing List

Packing List	1 x HID-2146 Medical panel PC 1 x Medical power adapter

Ordering Information

Ordering Information	HID-2146-B1-22-A1R 21.5" Arrow Lake Medical Multi-Touch Panel PC,Intel Core Ultra 5 225U/8GB Memory/USBC/HDMI/NFC/DC Out/6USB/LAN/COM/SPK/180W Medical adapter HID-2146-B1-25-A1R 21.5" Arrow Lake Medical Multi-Touch Panel PC,Intel Core Ultra 7 255U/8GB Memory/USBC/HDMI/NFC/DC Out/6USB/LAN/COM/SPK/180W Medical adapter Power Cord: E1702031000R EU Power Cord E1702031833R US Power Cord E170203183CR JP Power Cord E170P060380R UK Power Cord E1702031831R AU Power Cord E170P060391R CN Power Cord