

Features

- ❑ Add-on noise-cancelling mic and speaker modules for high-quality voice capture
- ❑ GPU expansion via PCIe4 for medical edge AI computing
- ❑ Narrow bezel and slim-profile design maximize viewing space and simplify deployment across clinical environments
- ❑ Intel® 15th Gen Arrow Lake processor
- ❑ Isolated USB/COM/LAN expansion via IET module for strict clinical requirement
- ❑ 12/24V DC output for easy powering clinical accessories
- ❑ Imprivata RFID integration for better workflow efficiency & system compliance
- ❑ CE/FCC/Medical UL certified



High Performance



GPU & IET Expansion



High-Quality Voice Capture



DC Power Output



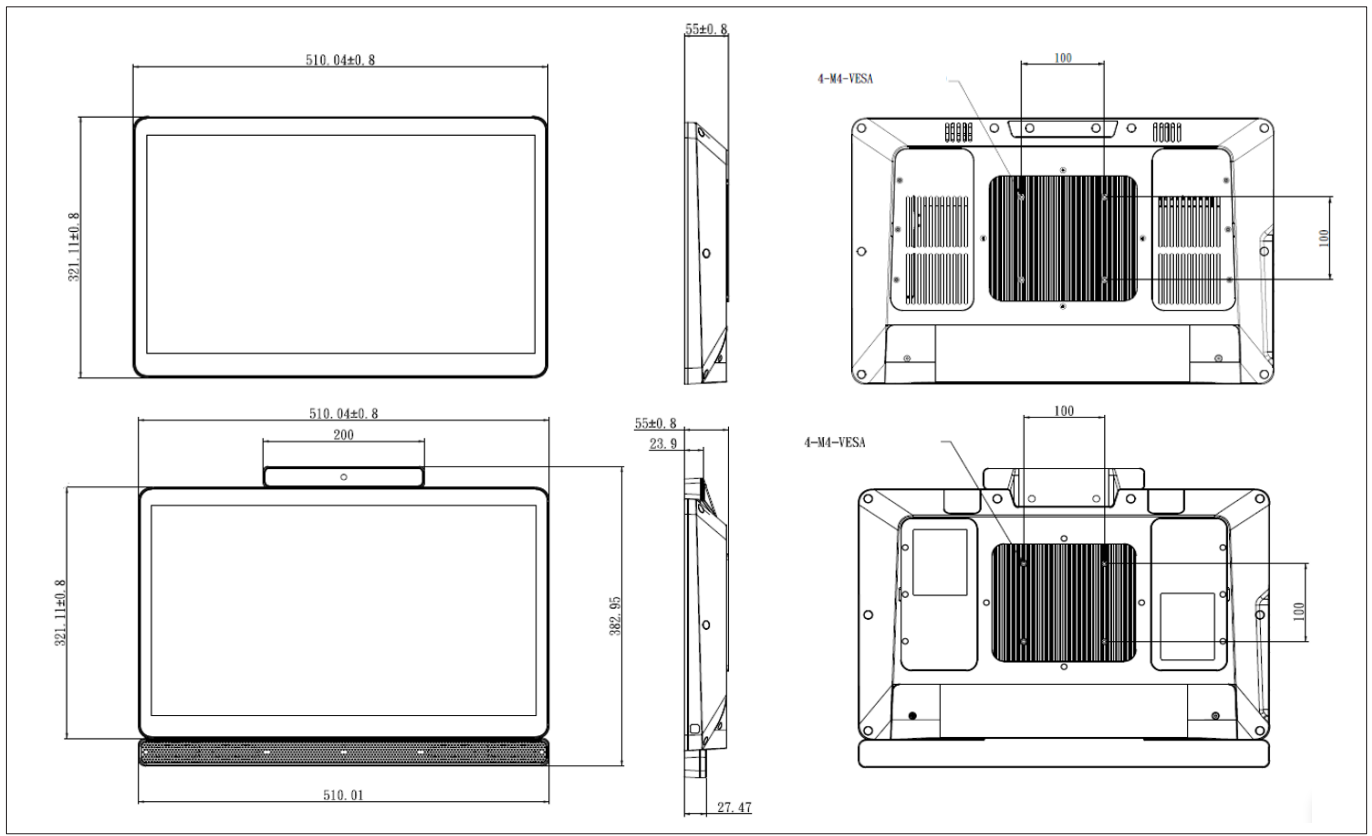
Medical Grade Safety

Specifications

System Information	
Processor	Intel® 15th Gen Arrow Lake Processor Intel® Core Ultra 5 225U 1.5 GHz Intel® Core Ultra 7 255U 2.0 GHz
System Memory	Two 262-pin DDR5 5600MHz SO-DIMM socket, supports up to 96GB
I/O Chipset	IT5782VG
TPM	NuvoTon NPCT750AADYX support SPI TPM 2.0
Expansion	
Expansion	1x PCIe x4, 1x M.2 Key B 2280 for AI card (PCIe2) 1x M.2 Key E 2230 for WIFI 1x IET expansion (optional)
Storage	
M.2	2x M.2 Key M 2280 (PCIe4) for storage
Display	
LCD Size	21.5"
Display Type	Full HD
Resolution	1920x1080
Contrast Ratio	1000:1
Luminance	250 cd/m2
Pixel Pitch	274.5x274.5
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	22ms
Backlight	LED
Touch Type	Projective capacitive multi-touch up to 10 points
Touch Light Transmission	86%
Touch Controller	USB touch (EETI EXC81H84)
I/O Ports	
USB Port	4x USB 2.0 2x USB 3.2 1x USB type C (Output: USB 3.1, display, 5V/3A 15W)
LAN Port	1x RJ-45
COM Port	1x RS-232/422/485 (RJ-45 type)
HDMI	1x HDMI out
Optional I/O	5kv isolated USB2/COM/LAN (via IET board)
Audio	
Standard	Speaker: 2x2W, 1x Combo Jack
Optional Module	10W sound bar, noise-cancelling microphone

Ethernet	
LAN Chipset	1x Intel® I226LM
Ethernet Interface	10/100/1000/2500Base-Tx GbE compatible
Wireless Communication	
Bluetooth/WLAN	Optional BT5.4/Wi-Fi 7 module
Data Collection	
NFC	Built-in NFC module
RFID	Optional Imprivata RFID
Camera	Optional 5.0M AF camera
Power	
Power Mode	AT/ATX (ATX is default setting)
DC Input	+24V
DC Input Connector	Lockable DC Jack
Adapter	Input: 100~240Vac/50~60Hz; Output: 180W 24V/5A medical power adapter
DC Power Output	12/24V DC, 48W
Battery	Optional built-in Li-ion battery (49 Wh)
Software Support	
OS	Win11/Linux
Certification	
Certification Information	CE : IEC/EN60602-1 (Safety), IEC/EN60601-1-2 (EMC) FCC : Part 15 Class B UL60601-1
Mechanical & Environmental	
Dimension (W x L x H)	510 x 321 x 55 (w/o add-on modules)
Weight (kg)	5.4 (w/o add-on modules)
Construction - Front	White plastic
Construction - Rear	White plastic
Finishing	Anti-microbial
Mounting	VESA 75 x 75/ 100 x 100 mm
Operating Temp.	0°C ~40°C (32°F ~104°F)
Operating Humidity	40°C @ 90% relative humidity, non-condensing
Storage Temp.	-20°C ~60°C (-4°F ~140°F)
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
IP Rating	Front IP65 ; back: IP54 (standard model)

Mechanical Drawing



Ordering Information

P/N	Touch Type	Processor	Memory	Storage	Panel Size	Resolution	Brightness	I/O Ports (COM/USB/LAN)	Display Output	Power Input	Working Temp.
HID-2146-B1-22-A1R	PCAP	Core Ultra 5 225U	8GB	N/A	21.5"	1920x 1080	250 cd/m ²	1 COM/7 USB/ 1 LAN	USB Type C & HDMI	+24V	0°C ~40°C (32°F ~104°F)
HID-2146-B1-25-A1R	PCAP	Core Ultra 7 255U	8GB	N/A	21.5"	1920x 1080	250 cd/m ²	1 COM/7 USB/ 1 LAN	USB Type C & HDMI	+24V	0°C ~40°C (32°F ~104°F)

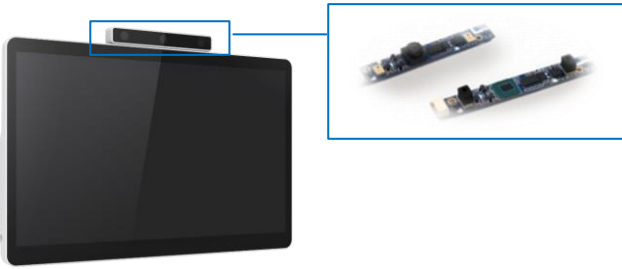
Packing List

Item	Quantity
HID-2146 Medical Panel PC	1
180W Medical Power Adapter	1

Optional Items

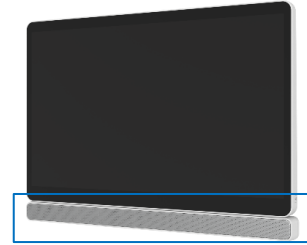
Items	P/N
10W Slim Sound Bar	RCC-HID-SB-01R
5.0M Camera Module	RCC-HID-CAM-01R
5.0M Camera & AI Array MIC	RCC-HID-CAM-02R
Internal Backup Battery	RCC-HID-BAT-04R
HID-2146 WiFi Module Kit	RCC-HID-WIFI-02R
HID-2146 DB-A IET Board (5KV Isolation LAN/ COM/ USB)	TBD
Yuan SC710N1-L 12G-SDI+HDMI2.0	RCC-CAP-PCIE-04R
Magewell Pro capture AIO 4K PCIe Gen2 x4	RCC-CAP-PCIE-05R
Hailo-8 2280 B+M Key M.2 Module AI Card	ACC-M2-80-AI-01R
NVIDIA T400E 4GB/30W	BCC-GPU-T400E-01R
Intel X550-T2 10G Network Card	BCC-PCIE-LAN-01R
U-1900 PCIe 4 Ports USB 3.1 Gen 2 Card 4 x USB 10Gbps Type-A	RCC-HID-PCIE-04R

Camera w/ Noise Cancelling Microphone



Specification	
Camera Resolution	5.0 MP
Interface	USB 2.0, UVC/UAC Compliant
Audio Enhancement	Dual digital microphones with intelligent noise cancellation
Voice Capture	Clear voice pickup from 30cm-100cm
Sensitivity	-26 dBFS
S/N Ratio	55 dB

High-Fidelity 10W Slim Sound Bar



Specification	
Rated Power	10W (5W x 2)
Maximum Power	14W (7W x 2)
System Impedance	8.0 Ω (Series) / 2.0 Ω (Parallel)
Resonant Frequency (F0)	180Hz \pm 15%
Sensitivity (SPL)	\sim 81 dB (Combined 1W/1m estimate)
Frequency Range	180Hz \sim 20kHz (Full-range coverage)

Smart Power Design for Clinical Mobility and Connectivity

DC Output		
Voltage	Power Output (W)	Suitable Device
12V (4A)	Up to 48W	Barcode scanners, external HDD/SSD, PTZ cameras
24V (2A)		Vital sign devices, infusion/syringe pumps, thermal printers

Internal Backup Battery	
Type	Li-ion Smart Battery (4S1P)
Voltage	14.4V
Capacity	\sim 49 Wh
Charge Time	< 3 hrs



I/O Overview

