



ALL-AROUND TOUCHING SOLUTION PROVIDER

# 21.5 Inch

## Touch the all-in-one machine

(Model No.HD215AA)



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Guangzhou TouchWo Electronics Co., Ltd

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Version V1.2



# Catalog

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# 1 Product Overview

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## 1. 1 Introduction

TouchWo capacitive touch screen all-in-one /monitor is the most convenient & advanced human-machine interactive equipment. Which integrates many functions such as touch screen. Computer, multimedia, acoustics, network, industrial design and innovated structure etc. with pure flat structure combined with excellent performance of touchscreen to reach the real human-machine interactive.

## 1. 2 Features

- Capacitive Touch: 10-point capacitive touch screen, 5 ms response;
- HD display: original panel with A type. Resolution 1920\*1080P, brightness 300cd/m<sup>2</sup>, pure color and natural;
- System compatible: touchscreen monitor/android/Windows touchscreen AIO pc optional;
- Stable performance: each unit undergoes multiple tests such as whole machine aging, temperature and humidity testing, static electricity detection, vibration, high voltage, touch click and display to ensure stable quality and support 7\*24H work;
- Structure crafts: private mould design, pure flat and slim style, new backlight integrated structure, good sealing, surface IP65 waterproof;
- Durable materials: Aluminum alloy frame & Metal back cover, Corrosion and oxidation resistance
- OEM services: Flexible to add serial and USB ports;  
(color、logo、camera、4G module、card reader、fingerprints module、POE power supply., etc) ;



- Simple Installation: wall mounted/desktop stand/embedded etc installations, plug and play. No need to debug;
- Strict quality control: the monitors have undergone multiple tests such as 48-hour ageing, electrostatic testing, vibration, voltage/electronic load test, voltage withstand test, touch/calibration test, controlled high temperature test, constant temperature and humidity test, controlled drop test.

## 2 Technical Parameters

### 2.1 System Design

Output (AIO pc)	Inside HDMI/VGA output
Input (touch monitor)	VGA、HDMI, input
Touch function	Latest projected capacitive touchscreen, 10 fingers touch
Display	HDMI/VGA support 1080P
PC	1080P (Full HD) MPEG、H.264.,etc
Structure design	Backlit integrated structure, reasonable heat dissipation
System modules	Combined PC,display,touch all-in-one

### 2.2 LED Panel Parameters

Panel type	LED panel (a-Si TFT-LCD WLED backlight), A grade		
Size	21.5 inch(16:9)		
Display area	477.6 (W) *269.1 (H) mm		
Max. resolution	Default is 1920*1080P		
Brightness	≥300cd/m <sup>2</sup>	Contrast	≥1200: 1
Response time	6(Typ.)(Tr/Td) ms	Refresh	60Hz
No. of colors	16.7M (LVDS, 30 Pins)		
Angle of viewing	Full viewing 89/89/89/89 (Typ.)(CR≥10)(L/R/U/D)		
Life time	30000H		



## 2.3 Touchscreen Parameters

Touch Technology	Projected capacitive touchscreen (PCAP)		
Response Time	< 5ms		
Touch Points	Standard 10 points touch, support zoom in/out pictures		
Touch effective recognition	> 1.5mm	Touch data output	Coordinate output
Scanning frequency	200Hz	Scanning Precision	4096×4096
Communication	Full speed USB 2.0,3.0	Theoretical clicks	5000M times above
Firmware	USB upgrade	Drive	Free drive, plug and play
Working current / voltage	180mA/DC+5V±5%		
Anti-light interference	Normal use when strong light such as sunlight, incandescent lamps, fluorescent lamps		
Surface hardness	Physical tempering, Mohs 7 explosion-proof glass		
Compatible OS	Win 7/ Win 8/Win 10/CE/Mac/Android/Linux /XP		

## 2.4 Electrical Performance

Input	110-240V AC 50/60Hz	Output	DC 12V5A/12V3A
Monitor	< 20W	Standby	< 0.5 W
Android	<36W	Speaker power	8 Ω 3W
Windows	<60W		

## 2.5 Working Environment

Working temperature	0°C-50°C
Working humidity	10% - 80% Relative humidity
Storage temperature	-5°C-60°C
Storage humidity	10% - 70%
Altitude	Below 5000 meters



## 2.6 AIO Configuration options

Program	Touch monitor	Android	X86 Standard version	X86 Elite version	OEM Service
Chip	Need to connect a computer to help work, more details pls check parameters 3.1	Octa core RK3288 Octa core RK3568 Hexa core RK3399	Default: Intel N5095/J3710/ J4125/J1900 (OPS optional)	Industrial board I3/I5/I7 (OPS optional)	Yes
Ram		2G/4G	2G/4G/8G/16G		
Hard disk		Standrad with 8G	SSD: 32G/64G/128G/256G/512G		
Graphics cards		16/32G optional , expandable	HDD: 500G/1T (optional)		
Resolution		Android HD	Core Graphics		
OS		Verion 7.1/9.0 (3568,version 11.0)	720P/1080P	Win 7/ Win 8/Win 10/ Linux	
Network	Integrated 10/100 / 1000M adaptive network card, wireless network card 802. 11a/b/g/n				

## 3 Interfaces/ Accessories

### 3.1 Touch monitor interfaces

DC port	1	Audio	1
VGA Input(15pins D-Sub)	1	HDMI Input	1
USB touch port	1		

### 3.2 Android AIO interfaces

DC port	1	Headphone	1
RJ45	1	HDMI	1
USB(OTG)	2	WIFI	1
TF /SD slot	1	TTL/232 serial options	



### 3.3 Windows AIO interfaces

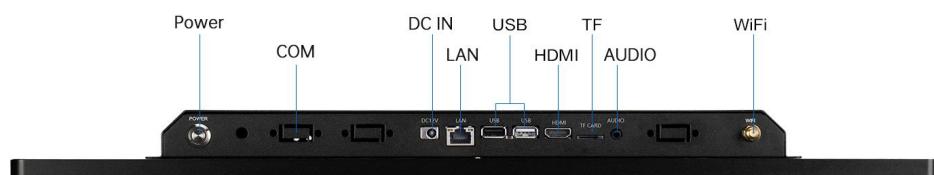
DC port	1	RJ45 port	1
VGA output(15pins D-Sub)	1	HDMI output	1
USB	4	Headphone /MIC	1/1
WIFI	1	232/485 serial options (2 to 6 pcs)	

## Interface

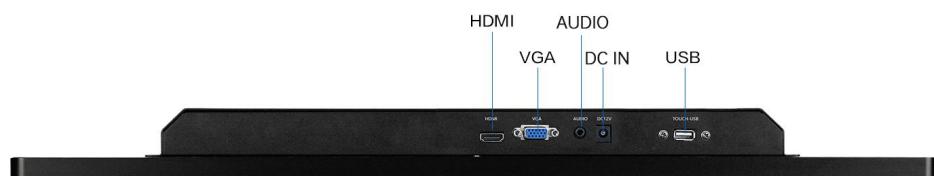
Windows OS



Android OS



Touch Monitor



Note: The interfaces and locations of different motherboards may vary, subject to availability.



### 3.4 Accessories

Instruction manual	1
Power cable	1
Wall mount bracket	1
Warranty card	1
Certificate	1
HDMI/USB cable	1 for each (default is 1.5 meter, for touch monitor only)
WIFI Antenna	1 (for Windows/Android AIO only)



## 4 Structure/Drawing

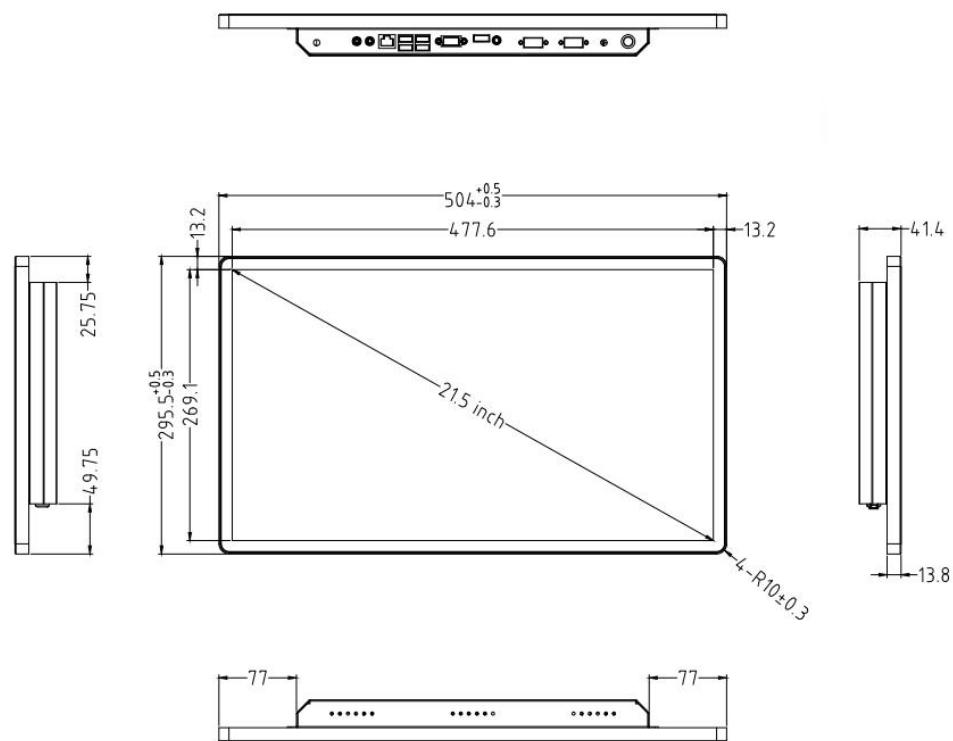
### 4.1 Physical Dimension

Screen	21.5 inch
Display area	477.6* 269.1 mm (16: 9)
Machine dimension (W×H×T)	504 (W) ×295.5 (H) ×41.4 (T) mm
Packing dimension (W×H×T)	570 (W) ×440 (H) ×145 (T) mm
Stand	Wall mount default (N.W 67.8 kg), Floor-Stand options
Wall mount holes (L×W)	100× 100 mm
Wall mount screws	M4
N.W	4.5 KG
G.W	6.12KG

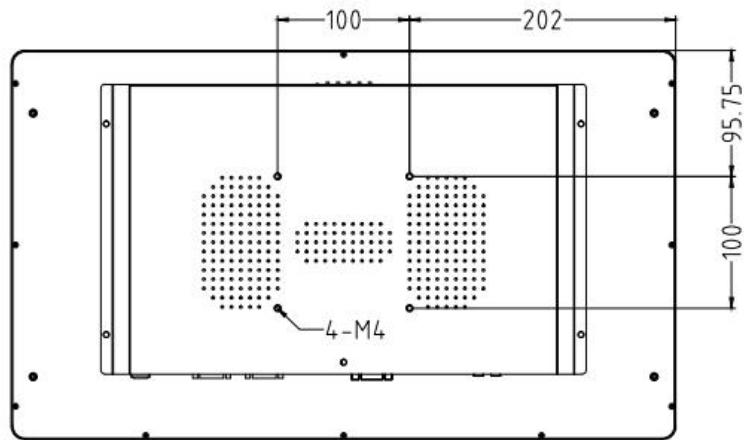


## 4.2 Drawings

### Front View



### Back View





# 5 Pictures

## 5. 1 Product Views



**Note: The interfaces and locations of different motherboards may vary, subject to availability.**

## 5. 2 Details





### 5. 3 Color

All Black



Black panel+Silver frame+Black back cover



More colors can be customized



## 5.4 Installation



Wall mount bracket



Desk base



Wall mount bracket



Simple desktop



Folding bracket



Desk base

**For more color options, please contact sales**



## 6 Warning

1. This device belongs to precision electronic equipment, front IP65, the overall protection level is IPX3, should pay attention to avoid water splashing rain

2. Do not place the device in a damp environment. Outdoor equipment needs to be equipped with a moisture-proof cover.

When it rains or dews, it needs to be protected to prevent the water from entering the machine and the mold. The wet environment will accelerate the rapid aging of electronic components, thereby reducing the service life of the product and causing damage to parts;

3. Do not leave the device exposed to strong UV light and direct sunlight for a long time. When the temperature is higher than 50 °C, the ultraviolet and high temperature illumination screen will accelerate the deflection of the liquid crystal molecules, and the screen will accelerate the aging. When the outdoor temperature is higher than 50 °C, it will be moved indoors or shaded;

4. The brightness of the product is not less than 300cd/m2. When the ambient brightness is high, the screen display will be unclear. Please avoid placing it outdoors when the sunlight is strong;

5. When the temperature is below 0 °C, the screen may not work properly due to the deflection of the liquid crystal molecules. It is not recommended to use below 0 °C;

- **The recommended ambient temperature for this product is 0-50°C, and humidity is 10%-80%.**



# 6 Warning

## FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.