



ALL-AROUND TOUCHING SOLUTION PROVIDER

23.8 Inch Capacitive Touch Screen All In One/ Monitor (Model No.TD238E)



Guangzhou TouchWo Electronics Co., Ltd

Version V1.2



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1 Product Overview

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 350cd/m², 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,DVI 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	23.8 inch(16:9)		
Display area	529 (W) *298.5 (H) mm		
Max. resolution	Default is 1920*1080P		
Brightness	$\geq 350\text{cd/m}^2$	Contrast	$\geq 1000: 1$
Response time	13/5(Typ.)(Tr/Td) ms	Refresh	60Hz
No. of colors	16.7M,74%NTSC (LVDS, 30 Pins)		
Angle of viewing	Full viewing89/89/89/89 (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
Monitor	< 24W	Standby	< 0.5 W
Android	<36W	Speaker power	8 Ω 3W
Windows	<60W		

2.5 Working Environment

Working temperature	0℃-50℃
Working humidity	10% - 80% Relative humidity
Storage temperature	-5℃-60℃
Storage humidity	0% - 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		
		16/32G optional , expandable	HDD: 500G/1T (optional)		
Graphics cards		Android HD	Core Graphics		
Resolution		720P/1080P			
OS		Verion 7.1/9.0 (3568,version 11.0)	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	2.1mm DC12V*1	Audio	1
VGA Input(15pins D-Sub)	1	HDMI Input	1
USB touch port	1	DVI Input	1

3.2 Android AIO interfaces

DC port	2.1mm DC12V*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

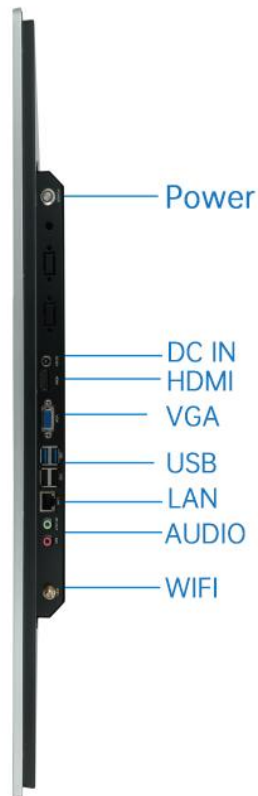
DC port	2.5mm DC12V*1	RJ45 port	1
VGA output(15pins D-Sub)	1	HDMI output	1
USB	4	Headphone /MIC	1/1
WIFI	1	232/485 serial options (2 to 6 pcs)	

Interface

Android OS



Windows 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

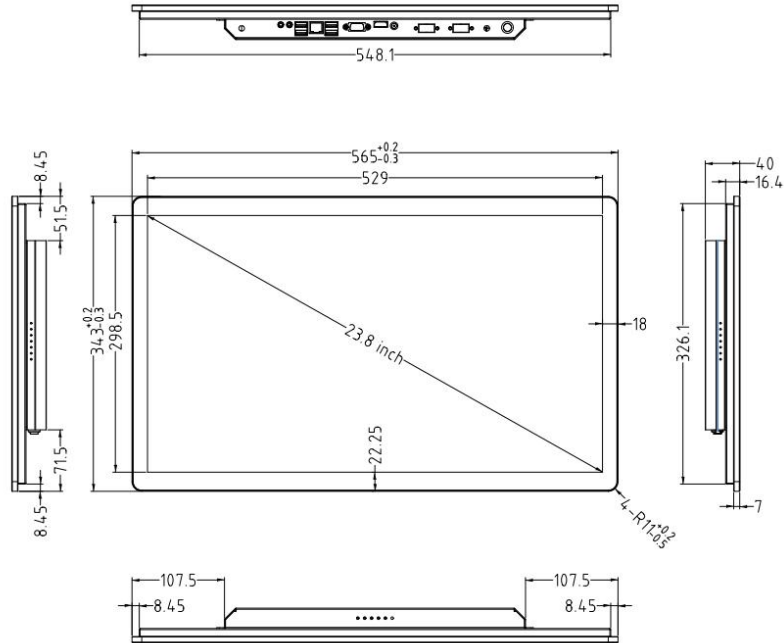
4.1 Physical Dimension

Screen	23.81.5 inch
Display area	529477.6* 298.5 mm (16: 9)
Machine dimension (W×H×T)	565504 (W) × 343 (H) × 40 (T) mm
Packing dimension (W×H×T)	640 (W) × 450 (H) × 145 (T) mm
Stand	Wall mount default (N.W 0.48 kg) , Floor-Stand options
Wall mount holes (L×W)	100×100 mm
Wall mount screws	M4
N.W	5.72 KG
G.W	7.53KG

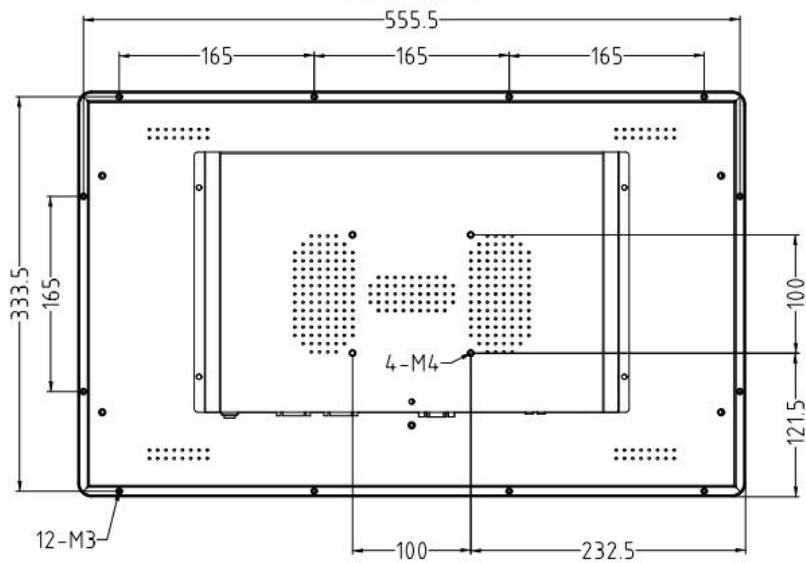


4.2 Drawings

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



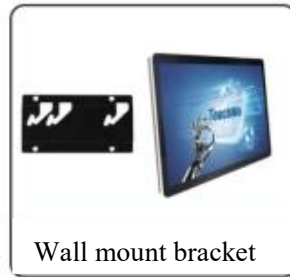
5.3 Product Style





5.4 Installation

Standard with:



Other can purchase separately



For more 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%.**