TSVH-156GE-PCT Rev.No: 01 DQ: TDS2200101-J01

# **SPECIFICATION: TSVH-156GE-PCT**

	LCD High Bright PCAP Touch Monitor
MODEL	TSVH
PRODUCT NO.	TSVH-156GE-PCT
CUSTOMER	
DATE	2021-01-01

APPROVED BY CLIENT

APPROVED BY TOUCH AND DISPLAYS CO.,LTD			
ENGINEER			
REVIEWER	Jung-Houn Tim		
CONFIRMED			
<b>X</b>			



## **DOCUMENT REVISION HISTORY**

Date	Rev. No	Page	Description
01,22	TDS001	All	New

## **MONITOR SPECIFICATIONS**

ITEMS	SPECIFICATION					
	Screen Diagonal	15.6"diagonal, Active matrix TFT LCD				
		(LED)				
	Aspect Ratio	16:9				
PANEL	Input Voltage	DC12V, 100-240 VAC, 50-60 Hz				
	Resolution	1920×1080@60Hz				
	Display Colors	16.2M, 72% NTSC				
	Brightness	1000nits				
	Contrast Ratio	800:1				
	Response Time	12(Typ)				
	Viewing Angle	85/85/85				
	LED Life Time	50,000				



### **TOUCH SCREEN SPECIFICATION**

ITEMS	SPECIFICATION
Touch Type	Projective Capacitive Multi Touch
Touch Input Method	Pen, Finger, Gloved Hand Activation
Touch Points	1~10 points
Touch Activation Force	No minimum touch activation force
Minimum Touch Object	6mm
Light Transmittance	≥85%
Surface Hardness	≥6H
Haze	3%
Glass	Durability scratch, abrasion and vandal
	resistant
Interface	USB2.0 FS, HID Compliant Plug & Play
Support OS	Windows®7,Windows®8,Windows®10,
	Windows®XP, Linux&Android, Mac



### LCD

Item	Specification	Unit	Note
Screen Size	15.6" real diagonal		
Driver Element	a-si TFT active matrix	-	-
Pixel Number	1920 x R.G.B. x 1080	pixel	-
Pixel Pitch	0.17925 (H) x 0.17925 (V)	mm	-
Pixel Arrangement	RGB vertical stripe		-
Display Colors	16.2M	color	-
Transmissive Mode	Normally Black	-	-
Surface Treatment	AG type, 3H hard coating,	-	-
Luminance, White	1000(Typ.)	Cd/m2	
Color Gamut	72 % of NTSC(Typ.)	-	-
Power Consumption	(Total 21 W (Typ) @ cell 4 W (Typ), BL 17 W	(Typ))	

Itom	Cumbal	Va	lue	Unit	Note	
Item	Symbol	Min.	Max.	Offic		
Storage Temperature	Tst	-40	90	$^{\circ}\!\mathbb{C}$	(1), (2)	
Operating Ambient Temperature	Тор	-30	85	$^{\circ}\!\mathbb{C}$	(1), (2)	

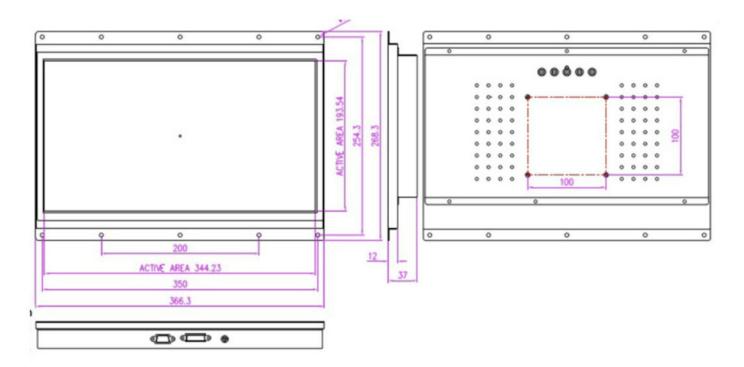
### **RELIABILITY TEST ITEM**

Test Item	Test Condition	Note
High Temperature Storage Test	90°C, 240 hours	
Low Temperature Storage Test	-40°C, 240 hours	
Thermal Shock Storage Test	-30°C, 0.5hour ←→85°C, 0.5hour; 1hour/cycle,100cycles	(1)(2) (4)(5)
High Temperature Operation Test	85°C, 240 hours	
Low Temperature Operation Test	-30°C, 240 hours	
High Temperature & High Humidity Operation Test	60°C, 90%RH, 240hours	(1)(2) (4)(6)
Shock (Non-Operating)	50G, 11ms, half sine wave, 1 time for ± X, ± Y, ± Z.	(2)(3)
Vibration (Non-Operating)	1.5G, 10 ~ 300 Hz, 10min/cycle, 3 cycles each X, Y, Z	(2)(3)



Iter	n	Symbol	Condition	Min.	Тур.	Max.	Unit	Note
	Red	Rx			0.652			
	Red	Ry			0.338			
	Green	Gx		Typ – 0.05	0.333	Typ + 0.05	-	(1), (5)
Color Chromaticity	Green	Gy	0 -00 0 -00		0.613			
(CIE 1931)	Blue	<u>Bx</u>	$\theta_x=0^\circ$ , $\theta_Y=0^\circ$ CS-2000		0.150			
(6.2 .66.)	Blue	Ву	R=G=B=255		0.050			
1	White	<u>Wx</u>	Gray scale		0.313			
		Wy			0.329			
Center Luminance of White		Lc		950	1000	-	cd/m <sup>2</sup>	(4), (5)
Contrast	Contrast Ratio			600	800	-	-	(2), (5)
Respons	Response Time		$\theta_x=0^\circ, \ \theta_Y=0^\circ$		<del>13</del>	<u>18</u> 17	ms	(3)
ТСОРОПО			ο <sub>χ</sub> -ο , ο <sub>γ</sub> -ο	-	12	17		
White Va	White Variation		$\theta_x=0^\circ$ , $\theta_Y=0^\circ$	70		-	%	(5), (6)
	Horizontal —	$\theta_x$ +	CR ≧ 10	80	85			
Viewing Angle		$\theta_{x}$ -		80	85		Deg.	(1), (5)
Viewing Angle		θ <sub>Y</sub> +		80	85			
	vertical	θ <sub>Y</sub> -		80	85			

### **MECHANICAL DRAWING**



NOTE



- 1. This is a simplified drawing and some components are not marked in detail. 2. Please contact our sales repres entative if you need further product information. 3. All specifications are subject to change without prior notice.
- 4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O , please contact our Team for more information.

#### **NOTE**

- 1. This is a simplified drawing and some components are not marked in detail. 2. Please contact our sales repres entative if you need further product information. 3. All specifications are subject to change without prior notice.
- 4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O please contact the Sales Team for more information.

