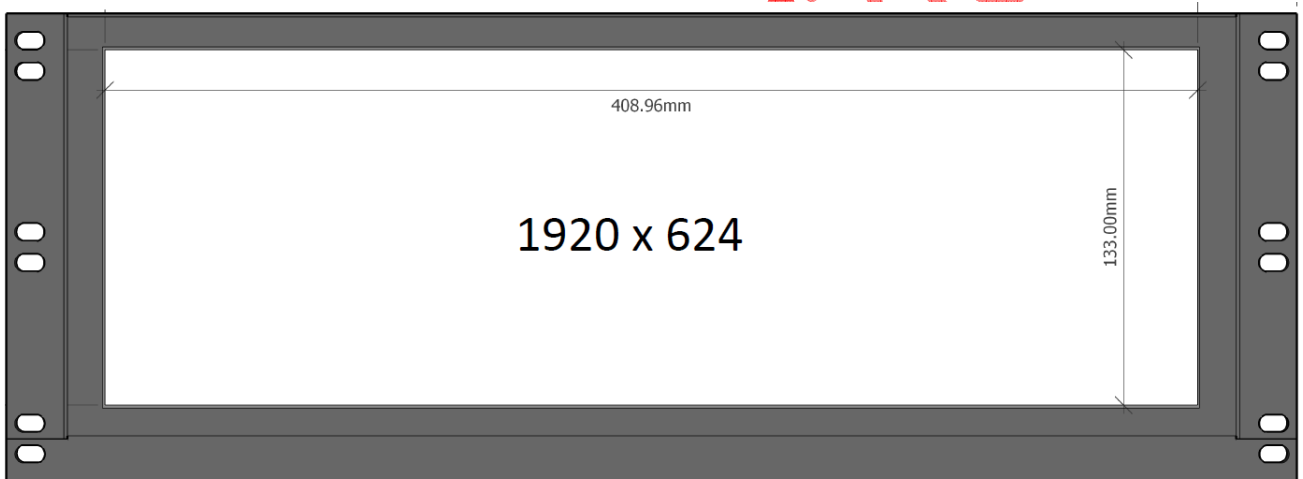


4RU 16.9" Monitor

Product Short Specification

Version 0.1
Apr 20, 2020



<i>Customer's Approval</i>	
<u>Signature</u>	<u>Date</u>

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Approved by

1. General Description

1.1 Introduction

This is a 4RU size industrial TFT LCD bezel frame monitor with touch panel, providing high image from the analogue RGB, DVI and DP interfaces. The diagonal active area is 16.9". The resolution of the TFT-LCD monitor is up to 1920 x 624 (subject to change) and can display up to 16.7M colors.

This monitor is part of the Densitron HMI Solutions portfolio and can be customized with modular options such as Densitron's proprietary Tactile-touch technology, or by adding buttons or rotary devices in the physical component area.

1.2 Main Features

Item	Contents
Display Type	TFT LCD
Screen Size	16.9" Diagonal (subject to changes)
Display Format	1920 x 624 pixels (subject to changes)
No. of Colour	16.7M (8-bit)
Overall Dimensions	483 (W) x 175.52 (H) x ~57.5 (D) mm
Active Area	408.96 (W) x 133 (H) mm
Pixel Pitch	0.213mm (W) x 0.213 (H) mm
Viewing Angle	L/R: 178° (Typ.) U/D: 178° (Typ.)
Contrast Ratio	1000:1
Brightness	400 cd/m ² (Typ.)
I/O	1 x VGA, 1 x DVI-I, 1 x DP
Backlight	LED
Mechanism	Bezel Frame (Chassis Frame)
Plug & Play	DDC2B (VESA Standard)
Response Time	20 msec (Rising + Falling)
Touch Panel	PCT
Touch Interface	USB (B Type)
Bonding Type	Tape Bonding
ESD	IEC 6100-4-2:2008, criteria B, Air:10kV, Contact: 6kV
Operating Temperature	0°C~+50°C
Storage Temperature	-20°C~+70°C

Item	Contents
ROHS	Compliant to RoHS 2.0

1.3 Input Signal

Item	Contents
RGB (VGA)	Analog RGB Amplitude: $0.7 \pm 0.05V$ Input Impedance: $75 \pm 2\% \text{ ohm}$ Sync: H/V Separate (TTL Level)
DVI	Swing Voltage: $400mV \leq V_{\text{sing}} \leq 600mV$ Termination Resistance: $50 \pm 10\% \text{ ohm}$
DP	480p, 576p, 720p, 1080i, 1080p

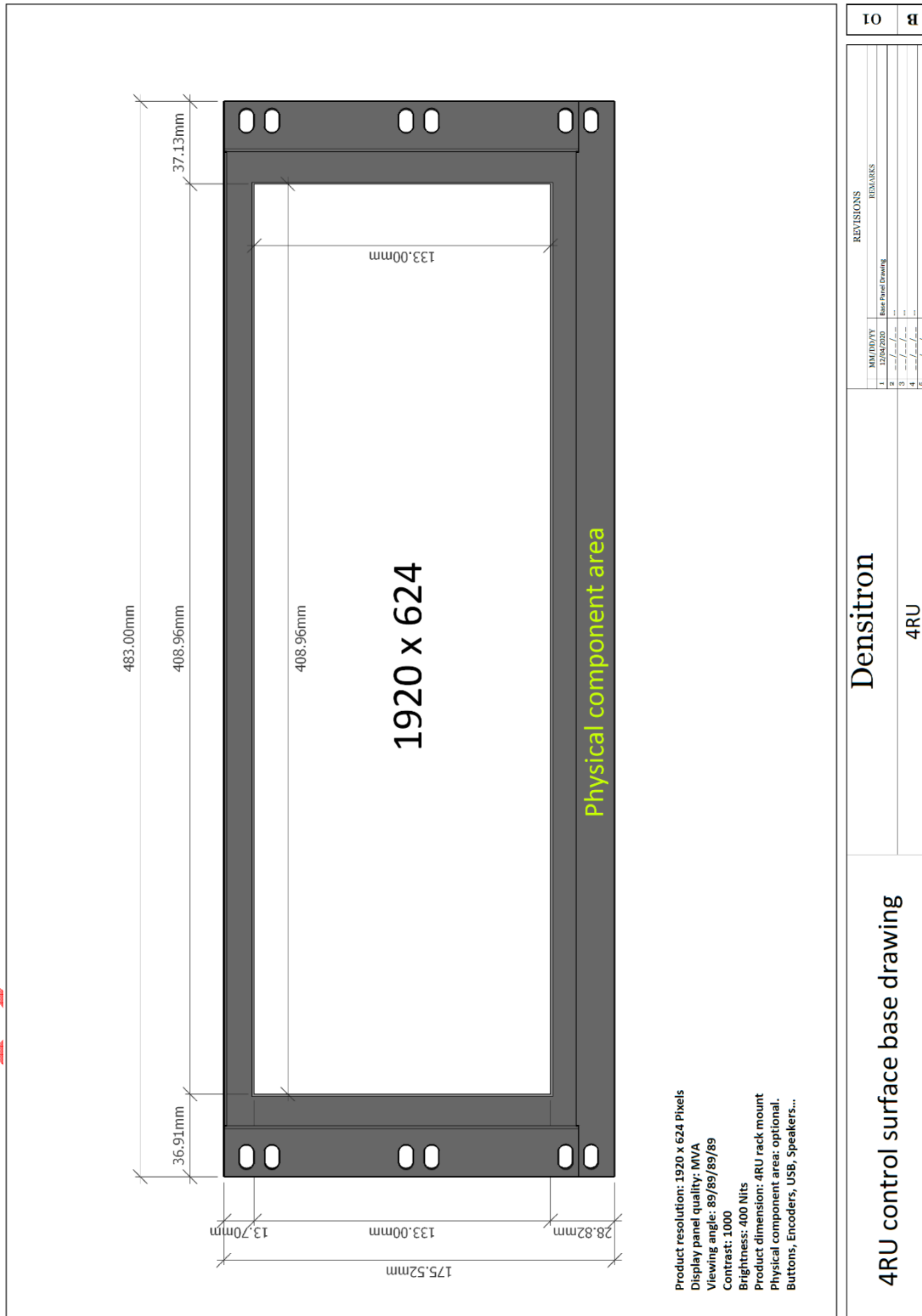
1.4 User Controls

Item	Contents
OSD Key Button	5 Keys
OSD Language	English

Preliminary Confidential

2. Mechanical Specification

2.1 Mechanical Drawing



2.2 Mechanical Characteristics

Item	Characteristic	Unit
Display Format	1920 (W) x 624 (H)	Pixels
Overall Dimensions	483 (W) x 175.52 (H) x ~57.5 (D)	mm
Active Area	408.96 (W) x 133 (H)	mm
Pixel Pitch	0.213 (W) x 0.213 (H)	mm
Weight	TBD	kg
Mounting	User hole for M4 Screw depth max 8.0mm TBD	

3. Optical Specification

3.1 Optical Characteristics

Characteristics		Symbol	Conditions	Min	Typ	Max	Unit		
Contrast Ratio		CR	-	-	1000	-	-		
Response time		TR + TF	-	-	20	40	ms		
Viewing Angle	Left/ Right	-	CR>10	-	178	-	deg		
	Up/ Down	-		-	178	-			
Colour Chromaticity	Red	Rx	-	-0.05	0.640	+0.05	-		
		Ry			0.330				
	Green	Gx			0.300				
		Gy			0.660				
	Blue	Bx			0.140				
		By			0.060				
	White	Wx			-0.002			0.313	+0.002
		Wy						0.329	
Brightness		-	-	-	400	-	cd/m ²		

4. Environmental Specification

Item		Remark
LCD	Operating Temperature	-0°C ~ +50°C
	Storage Temperature	-20°C ~ +70°C
	Operating Humidity	5% ~ 90% RH
	Storage Humidity	5% ~ 90% RH
Touch Screen	Operating Temperature	-0°C ~ +50°C(45% ~ 85% RH)
	Storage Temperature	-20°C ~ +70°C(45% ~ 95% RH)

5. Quality Assurance Specification

5.1 Conformity

These inspection standards shall be applied to Stretched LCD Panel.

5.2 Environment Required

Customer's test & measurement are required to be conducted under the following conditions:

Ambient Temperature: 20 ~ 25°C

Humidity: 60 ~ 70% RH

Ambient Illumination: Fluorescent light (Day-Light type) display surface illumination to be 300~700Lux
(standard 500Lux)

Viewing distance: 30 - 40cm from the surface of the monitor

Viewing Angle: 90 degree to the front surface of display panel.

Inspection resolution 1920 × 285

Finger glove (or finger cover) must be worn by the inspector.

Inspection table or jig must be anti-electrostatic.