

## Features

- 21.5" TFT
- HDMI Input
- 1920x1080 Resolution
- 500 cd/m<sup>2</sup> Brightness
- IPS Panel
- Full Viewing Angles
- -10°C to +60°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

## RS PRO 21.5,, HDMI TFT LCD Display

RS Stock No.: 0712662



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

*This RS PRO HDMI Display is a 21.5 (16.9) TFT LCD Display, with a high resolution of 1920x1080 (FHD), IPS technology and high brightness. This model is composed of:*

- *A TFT LCD panel*
- *Backlight system*
- *HDMI interface*

*Engineered for seamless integration with embedded computing systems, this TFT display connects effortlessly to any device featuring an HDMI output. Its high-brightness screen and wide operating temperature range deliver outstanding performance in both indoor and outdoor environments, making it the perfect choice for demanding applications.*

## General Specifications

<b>Panel Size</b>	21.5
<b>Resolution</b>	1920x1080
<b>Display Technology</b>	IPS
<b>Contrast Ratio</b>	1000
<b>Brightness (cd/m2)</b>	500
<b>Video Input</b>	HDMI
<b>Operating Temperature</b>	-10°C to +60°C
<b>Storage Temperature</b>	-20°C to +60°C
<b>Touch Panel</b>	No Touch
<b>Touch Panel Interface</b>	N/A

## Mechanical Specifications

<b>Overall Dimensions WxHxD (mm)</b>	497.6 x 292.2 x 24.2
<b>Active Area WxH (mm)</b>	476.06 x 267.79



## CN1 – Power Input – DC Jack SCD480CCS000B00GE or compatible

Pin No.	Symbol	I/O	Function
1	12V	P	Power Supply +12V
2	GND	P	Ground

## CN2 – Backlight Control - WAFER P2.0mm: 2001S-03-RTE or compatible

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	PWM	I	Back-light Dimming control (internal pull up to 3.3V)
3	N.C.	-	No Connection

## CN3 – HDMI A Type

Pin No.	Symbol	I/O	Function
1	TMDS 2+	I	TMDS Data2+
2	GND	P	TMDS Data2 Shield
3	TMDS 2-	I	TMDS Data2-
4	TMDS 1+	I	TMDS Data1+
5	GND	P	TMDS Data1 Shield
6	TMDS 1-	I	TMDS Data1-
7	TMDS 0+	I	TMDS Data0+
8	GND	P	TMDS Data0 Shield
9	TMDS 0-	I	TMDS Data0-
10	TMDS CLK+	I	TMDS Clock+
11	GND	P	TMDS Clock Shield
12	TMDS CLK-	I	TMDS Clock-
13	N.C.	-	N.C.
14	N.C.	-	N.C.
15	DDC_SCL	I	IIC SCL to EDID ROM

16	DDC_SDA	I/O	IIC SDA to EDID ROM
17	GND	P	DDC/CEC Ground
18	HD_5V	P	+5V Power
19	HPD	O	Hot Plug Detect

## Electrical Specifications

### HDMI TFT LCD Module

Item	Symbol	Values			Unit
		Min	Typ.	Max.	
Supply Voltage	12V	11	12	13	V
PWM frequency		100		10K	Hz
PWM Duty		17	-	100	%
PWM Dimming Voltage	VPWM-IH	3.3		8	V
	VPWM-IL	-	0.3	-	V
LED Enable Control Voltage	VLED_EN-IH	3.3	-	12	V
	VLED_EN-IL	-	-	0.5	V
Supply Current	ICC(12V)	-	2060	2260	mA
LED life-time		3000	-	-	Hr

### Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
Brightness	--	Note1, Note 3, ( $\theta = 0^\circ$ , Normal Viewing Angle)	400	500	--	cd/m <sup>2</sup>	
Uniformity	B-uni		(75)	--	--	%	
Contrast Ratio	CR		800	1000	--	--	
Response Time	Tr		--	12	22	ms	
	Tf		--	10	20	ms	
Color Chromaticity	White		Wx	0.263	0.313	0.363	--
			Wy	0.279	0.329	0.379	--
View angle	Horizontal	$\theta_{x+}$	Center	80	89	--	

		θx-	CR≥10	80	89	--	
	Vertical	θY+		80	89	--	
		θY-		80	89	--	

## Approvals

<b>Declarations</b>	UKCA / RoHS / REACH
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## Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
<b>HA-21HVEEUAB0-AA(RS)</b>	RS PRO	21.5" HDMI TFT	400 cd/m2 Brightness	PCAP Touch	IPS Technology
<b>0712660</b>	RS PRO	18.5" HDMI TFT	1000 cd/m2 Brightness	No Touch	IPS Technology