

## Features

- 10.4" TFT
- HDMI Input
- 1024 x 768 Resolution
- Projected Capacitive (PCAP) Touch Screen
- USB Touch Interface
- 800 cd/m<sup>2</sup> Brightness
- IPS Panel
- Full Viewing Angles
- -30°C to +80°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

## RS PRO HDMI TFT LCD Display

RS Stock No.: 254-0014



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

## Product Description

This RS PRO HDMI Display is a 10.4" (4:3) TFT LCD Display, with a high resolution of 1024x768 (XGA), IPS technology and high brightness. This model is composed of:

- A TFT LCD panel
- Backlight system
- A projected capacitive touch panel
- HDMI interface

It is designed to make Raspberry Pi usage easy. You can simply use this TFT display with your Raspberry Pi, or any other computer device with HDMI as an output. The high brightness and wide operating temperature make this model the ideal solution for any indoor or outdoor application.

## General Specifications

Panel Size	10.4"
Resolution	1024x768
Display Technology	IPS
Contrast Ratio	1000
Brightness (cd/m <sup>2</sup> )	800
Video Input	HDMI
Operating Temperature	-30°C to +80°C
Storage Temperature	-30°C to +80°C
Touch Panel	Projected Capacitive
Touch Panel Interface	USB & I2C

## Mechanical Specifications

Overall Dimensions WxHxD (mm)	238.6 x 175.8 x 24.54
Active Area WxH (mm)	210.43 x 157.82



## 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

## 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	N.C.	-	No Connection
3	PWM	I	Back-light Dimming control (internal pull up to 3.3V)

CN4 – USB Touch Interface - WAFER P1.25mm: 50271-0050L-002 or compatible

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	VDD_5V	P	Power supply for USB I/F
3	GND	P	Ground
4	D+	I/O	D+
5	D-	I/O	D-

CN5 – I2C Touch Interface - WAFER P1.25mm: 50271-0060L-002 or compatible

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	VDD	P	Power Supply
3	SCL	I	SCL to PCT Controller
4	SDA	I/O	SDA to PCT Controller
5	INT	O	Interrupt
6	RESET	I	RESET

## Electrical Specifications

HDMI TFT LCD Module

Item	Symbol	Values			Unit
		Min	Typ.	Max.	
Supply Voltage	12V	11	12	13	V
PWM frequency		1K		20K	Hz
PWM Dimming Voltage	V <sub>PWM-IH</sub>	3.0	3.3	5	V
	V <sub>PWM-IL</sub>	0	-	0.3	V
Supply Current	ICC(12V)	-	TBD	-	mA
LED life-time		-	70000	-	Hr

## Projected Capacitive Touch Panel

Item	Specification
Screen Size	10.4 inch
Type	Transparent Type Projected Capacitive
Input Mode	Human's Finger
Finger	10
Interface	USB 2.0 or I2C
Operating system OS	Windows / Linux / Android
Cover glass pencil-hardness	7H
Response time	25
Driver IC	ILI2511

## Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Brightness	--	Note1, Note 3, ( $\theta = 0^\circ$ , Normal Viewing Angle)	640	800	--	cd/m <sup>2</sup>
Uniformity	B-uni		-	70	-	%
Contrast Ratio	CR		800	1000	--	--
Response Time	Tr + Tf		--	20	35	ms
Color Chromaticity	White	Wx	0.260	0.310	0.36	--
		Wy	0.282	0.332	0.382	--
View angle	Horizontal	$\theta_{x+}$	80	88	--	
		$\theta_{x-}$	80	88	--	
	Vertical	$\theta_{Y+}$	80	88	--	
		$\theta_{Y-}$	80	88	--	

## Approvals

Declarations	UKCA / RoHS / REACH
--------------	---------------------

## Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
254-0013	RS PRO	10.4" HDMI TFT	900 cd/m2 Brightness	No Touch	IPS Technology
254-0009	RS PRO	8" HDMI TFT	1100 cd/m2 Brightness	Capacitive Touch	IPS Technology