

Features

- 7" TFT
- HDMI Input
- 1024 x 600 Resolution
- Projected Capacitive (PCAP) Touch Sreen
- USB Touch Interface
- 1300 cd/m² Brightness
- IPS Panel
- Full Viewing Angles
- -20°C to +70°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

RS PRO HDMI TFT LCD Display

RS Stock No.: 254-0007



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 7" (16:9) TFT LCD Display, with a high resolution of 1024x600 (WSVGA), 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	7"
Resolution	1024x600
Display Technology	IPS
Contrast Ratio	600
Brightness (cd/m ²)	1300
Video Input	HDMI
Operating Temperature	-20°C to +70°C
Storage Temperature	-30°C to +80°C
Touch Panel	Projected Capacitive
Touch Panel Interface	USB & I2C

Mechanical Specifications

Overall Dimensions WxHxD (mm)	182.6 x 117 x 23.4
Active Area WxH (mm)	154.21 x 85.92

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

CN4 – 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

CN5 – USB Touch Interface - WAFER P1.25mm: 50271-0050L-002 or compatible

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	VDD	P	Power Supply 5V
3	GND	P	Ground
4	D+	I/O	D+
5	D-	I/O	D-

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 Dimming Voltage	V _{PWM-IH}	3.3	8	8	V
	V _{PWM-IL}	-	0.3	-	V
Supply Current	ICC(12V)	-	590	610	mA
LED life-time		-	70000	-	Hr

Projected Capacitive Touch Panel

Item	Specification
Screen Size	7.0 inch
Type	Transparent Type Projected Capacitive
Input Mode	Human's Finger
Finger	5
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)	1000	1300	--	cd/m ²
Uniformity		B-uni		70	75	-	%
Contrast Ratio		CR		400	600	--	--
Response Time		Tr + Tf		--	16	32	ms
Color Chromaticity	White	Wx		0.260	0.310	0.360	--
		Wy	0.280	0.330	0.380	--	
View angle	Horizontal	θ_{x+}	Center CR \geq 10	80	85	--	
		θ_{x-}		80	85	--	
	Vertical	θ_{Y+}		80	85	--	
		θ_{Y-}		80	85	--	

Approvals

Declarations	UKCA / RoHS / REACH
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Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
254-0012	RS PRO	10.1" HDMI TFT	1250 cd/m ² Brightness	Capacitive Touch	IPS Technology
254-0006	RS PRO	7" HDMI TFT	1500 cd/m ² Brightness	No Touch	IPS Technology