

## Features

- 7" TFT
- USB-C Input
- 1024x600 Resolution
- 700 cd/m<sup>2</sup> Brightness
- IPS Panel
- Full Viewing Angles
- 0°C to +70°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

## RS PRO 7,, USB-C TFT LCD Display

RS Stock No.: 0712664



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 USB-C 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*
- *USB-C interface*

*Engineered for seamless integration with embedded computing systems, this TFT display connects effortlessly to any device featuring an USB-C PD output. The single USB-C input powers the display, video and touch from a single cable. 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

Panel Size	7
Resolution	1024x600
Display Technology	IPS
Contrast Ratio	600
Brightness (cd/m2)	700
Video Input	USB-C
Operating Temperature	-0°C to +70°C
Storage Temperature	-30°C to +80°C
Touch Panel	No Touch
Touch Panel Interface	N/A

## Mechanical Specifications

Overall Dimensions WxHxD (mm)	164.9 x 100 x 11.9
Active Area WxH (mm)	154.21 x 85.92



## CN1 – USB Type-C

Pin No.	Symbol	I/O	Function
A1	GND	P	Ground
A2	TX1+	I/O	High speed data path TX for DP Alt Mode.
A3	TX1-	I/O	
A4	VBUS	P	Cable bus power +5V only.
A5	CC1	I/O	Type-C Port Configuration Channel
A6	D+	I/O	USB 2.0 Interface.
A7	D-	I/O	
A8	SBU1	I/O	USB Type-C Sideband Use 1
A9	VBUS	P	Cable bus power +5V only.
A10	RX2-	I/O	High speed data path RX for DP Alt Mode.
A11	RX2+	I/O	
A12	GND	P	Ground
B1	GND	P	Ground
B2	TX2+	I/O	High speed data path TX for DP Alt Mode.
B3	TX2-	I/O	
B4	VBUS	P	Cable bus power +5V only.
B5	CC2	I/O	Type-C Port Configuration Channel
B6	D+	I/O	USB 2.0 Interface.
B7	D-	I/O	
B8	SBU2	I/O	USB Type-C Sideband Use 2
B9	VBUS	P	Cable bus power +5V only.
B10	RX1-	I/O	High speed data path RX for DP Alt Mode.
B11	RX1+	I/O	
B12	GND	P	Ground

## CN2 – Backlight Control – 50271-0040L-002 or compatible

Pin No.	Symbol	I/O	Function
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1	Power on/off	I	Power On/Off control.
2	Brightness increased	I	Brightness Increase.
3	Brightness decrease	I	Brightness decrease.
4	GND	P	Ground

## Electrical Specifications

### TFT LCD Module

Item	Symbol	Values			Unit
		Min	Typ.	Max.	
Supply Voltage	VBUS	-	5.0	5.5	V
required current	IBUS	-	800	900	mA
LED Life time	-	-	50000	-	Hr

### Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
Brightness	--	Note1, Note 3, ( $\theta = 0^\circ$ , Normal Viewing Angle)	560	700	--	cd/m <sup>2</sup>	
Uniformity	B-uni		70	75	--	%	
Contrast Ratio	CR		400	600	--	--	
Response Time	Tr		--	4	8	ms	
	Tf		--	12	24	ms	
Color Chromaticity	White		Wx	0.260	0.310	0.360	--
			Wy	0.280	0.330	0.380	--
View angle	Horizontal	$\theta_{x+}$	Center	80	85	--	

		$\theta x-$	CR $\geq$ 10	80	85	--	
	Vertical	$\theta Y+$		80	85	--	
		$\theta Y-$		80	85	--	

## 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>0712665</b>	RS PRO	7" USB-C TFT	600 cd/m2 Brightness	Capacitive Touch	IPS Technology
<b>0712666</b>	RS PRO	8" HDMI TFT	600 cd/m2 Brightness	No Touch	IPS Technology