

## PRD10627 MONITOR 21.5" 16:9 24V FIT (FI RCA) WITH WALL SUPPORT DATASHEET



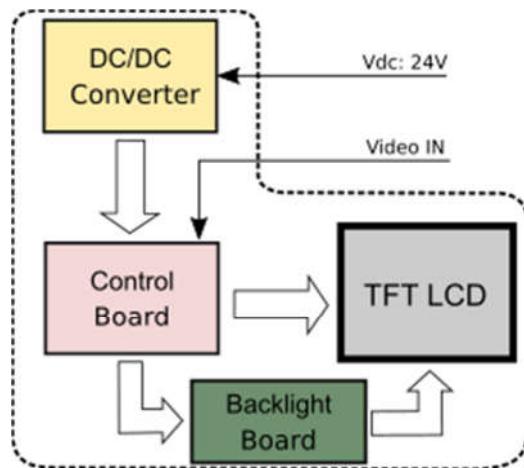
### DESCRIPTION

The 21.5" monitor has the most advanced technology when it comes to image, it being composed of the amorphous silicon thin film transistor liquid crystal display (a-Si TFT LCD) panel structure with driver Large-scale integration (LSI) for driving the TFT array and the LED backlight. It was specifically designed, qualified and supported for use in automotive applications. The display supports the Full HD – 1920(H) x 1080(V) screen format and 16.7M colors (8-bit RGB data input). Its high resolution and wide viewing angle, allied with LED backlight cutting edge technology, are differentials in this product.

### FEATURES

- 21.5." High resolution active matrix LCD;
- LED backlight system;
- Full HD resolution (1920 x 1080);
- Wide viewing angle;
- 8-bit of support color (16,7M colors RGB);
- Auto ON/OFF in presence/absence of video signal;
- Protective glass;
- Overcurrent and overvoltage protection;
- Inverted power supply protection;
- Compact and innovative design;
- Easy to install on every automotive video system.

### BLOCK DIAGRAM



Draw	By	Date	Sign	MONITOR 21.5" 16:9 24V FIT (FI RCA) WITH WALL SUPPORT	Ref. ACTIA	Index
Draw	E. Viana	01/31/2018				
Verif.	E. Freitas	01/31/2018			<b>PRD10627</b>	<b>Rev01</b>
Appr.	C.Dambroz	01/31/2018				Page 1/4

## TECHNICAL DATA

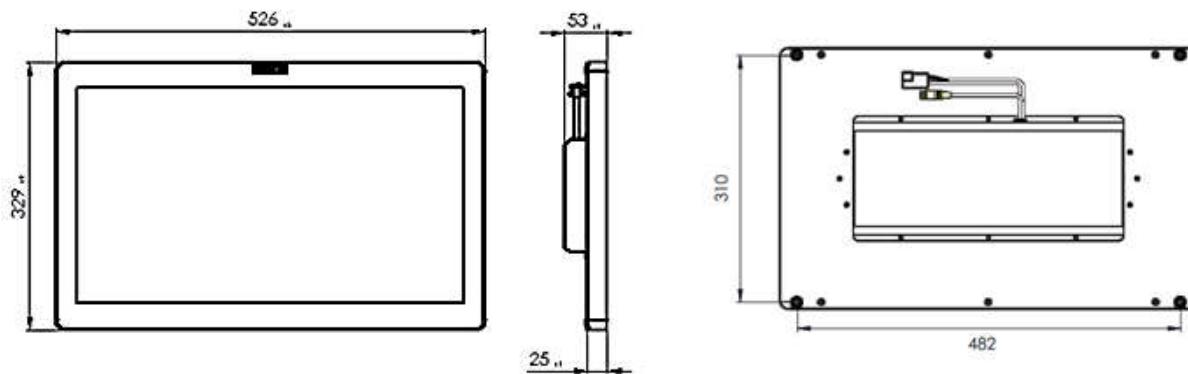
PARAMETER	MIN	TYP	MAX	UNIT
Supply voltage range	18	24	32	Vdc
Power consumption (operation)	-	16	20	W
Power consumption (standby)	-	3	3.5	W
Current Consumption (standby)	-	125	-	mA
Current Consumption (operation)	-	665	1000	mA
Luminance	200	250	-	cd/m <sup>2</sup>
Contrast Ratio	-	3.000	-	-
Viewing angle CR=10 (horizontal)	75	89	-	°
Viewing angle CR=10 (vertical)	75	89	-	°
Operating temperature range	0	-	50	°C
Storage temperature range	-20	-	60	°C
Humidity (operation and storage)	5	-	90	%RH
Degree of protection		IP20		-
Video System		PAL / NSTC		-
Video Input signal		CVBS / 1.0Vpp @ 75ohm		-
Aspect Ratio		16:9		-
Screen resolution		1920 x 1080		pixels
Pixel Pitch		248.25 x 248.25		µm
Number of colors		16.7M colors (RGB 8-bit)		-
Life Time		30.000		h
Weight		6.7		Kg

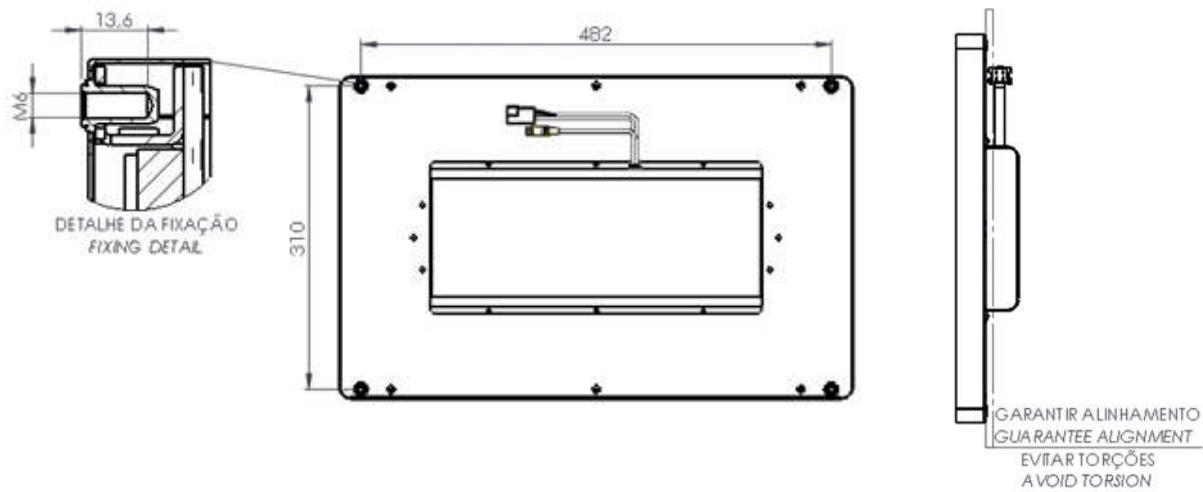
RELIABILITY TESTS (If there is)	
Operating Temperature	Method: 70°C to -20°C at rate of 1.5°C/min. (15min. each extremes).
Thermal Shock	ANSI/ASAE EP455 - 5.1.3 -40°C to 70°C at rate of 4°C/min. (1 hour each extremes).
Humidity	SAE J1455 4.2.3 method 1 -40°C to 70°C @ 8 hours (not operational)
Salt Spray	SAE J1455 – 4.3 (ASTM B117). 48 hours of application.
Vibration, Random	SAE J1455 – 9.4.4.2 8 hours each axis @ 50°C (5Hz to 600Hz).
Shock/Crash safety	ANSI/ASAE EP455 – 5.14.1 A single 11ms half sine pulse of 490m/s^2 on the function axe.
Overvoltage	36V for 60min.
Reverse Voltage	ANSI/ASAE EP455 – 5.10.4
Short circuit protection	All inputs to Vdc, Ground and case for 1 hour.

<b>Starting Profile</b>	ISO16750- 2- 4.6.3
<b>Load Dump</b>	ISO16750-2- 4.6.4 160V (+-10%), tr=0,1ms, td=100ms, Ua=28Vdc.
<b>Switching spikes - Transients</b>	ISO7637-2 Pulse 1, 2a, 2b, 3a and 3b.
<b>Superimposed alternating voltage</b>	ISO16750-2- 4.4 - Severity 1, 2 and 3.
<b>Discontinuities in supply voltage</b>	ISO16750-2- 4.6 Usmin with 100ms drop.

**DIMENSIONS**

(Millimeters)

**CONNECTOR DETAILS**

**INSTALLATION**

Wall mounted Monitor 21.5" support

