

INTRODUCTION



CHAPTER 1

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Introduction

Atlas industrial monitors are high performance color TFT flat panel monitors specifically designed for harsh industrial environments including Class I Division 2, Class II Division 2 and Class 3 hazardous locations. Each monitor accepts standard analog VGA or digital DVI inputs and can display all VESA video modes up to 1280 x 1024 at 75Hz with 16 million colors. An optional 5-wire analog touch screen is available that offers both RS-232 and USB interface capability. The monitor is housed in a heavy duty steel chassis with a powder coated machined aluminum bezel. The monitor is certified to NEMA 4/4X/12 standards and is UL/CUL listed. Panel mounting is simplified using convenient mounting clips instead of conventional studs. All monitors are shipped with a power input wiring receptacle, VGA cable, touch screen cable (if equipped), mounting hardware and Quick Installation Guide. This user's guide can be downloaded from the Documentation area of the AutomationDirect.com website.

Features

- UL 508 and ANSI/ISA 12.12.01-2012 listed for Hazardous Locations: Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G and Class III hazardous locations when mounted in a NEMA Type 1, 4, 4X or 12 enclosure
- NEMA 4/4X/12 front bezel
- 2-Year warranty
- Integral 100 -240 VAC power supply
- Simplified installation with no studs
- Thin design - Less than 3" behind bezel
- Accepts analog 15-pin Video input, digital input DVI-D
- VESA compliant - all modes up to SXGA, 75Hz
- Optional 5-wire resistive touch screen with both RS-232 and USB interface

Supported PC Video Modes

Mode	Dot Clock (MHz)	Horizontal Freq (KHZ)	Vertical Freq (Hz)	H Sync Polarity	V Sync Polarity
640 x 350 @ 70Hz	25.144	31.430	70.000	P	N
640 x 400 @ 70Hz	28.287	31.430	70.000	N	P
720 x 400 @ 70Hz	28.287	31.430	70.000	N	P
640 x 480 @ 60Hz	25.175	31.469	59.940	N	N
640 x 480 @ 72Hz	31.500	37.861	72.809	N	N
640 x 480 @ 75Hz	31.500	37.500	75.000	N	N
800 x 600 @ 56Hz	36.000	35.156	56.250	P	P
800 x 600 @ 60Hz	40.000	37.879	60.317	P	P
800 x 600 @ 72Hz	50.000	48.077	72.188	P	P
800 x 600 @ 75Hz	49.500	46.875	75.000	P	P
*1024 x 768 @ 60Hz	65.000	48.363	60.005	N	N
*1024 x 768 @ 70Hz	75.000	56.476	70.070	N	P
*1024 x 768 @ 75Hz	78.750	60.023	75.030	P	P
**1280 x 1024 @ 60Hz	108.000	63.981	60.020	P	P
**1280 x 1024 @ 75Hz	135.000	79.976	75.035	P	P

Note: *These PC display modes produce the best image quality on the ATM1500/ATM1500T.
 **These PC display modes produce the best image quality on the ATM1700/ATM1700T and ATM1900/ATM1900T.

Specifications

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Part Number	ATM1500/ATM1500T	ATM1700/ATM1700T	ATM1900/ATM1900T
Specification			
Display:			
Display Size	8.98" x 11.97"	10.64" x 13.30"	11.85" x 14.82"
Active Area H x W	(228.1mm x 304.0mm)	(270.3mm x 337.8mm)	(301.0mm x 376.4mm)
Native Resolution	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
VESA Modes Supported	Up to 1280 x 1024 @75Hz		
Displayable Colors	16M		
Brightness, Typical	250 Nit	300 Nit	270 Nit
Contrast Ratio, Typical	800:1	1000:1	2000:1
Horizontal/Vertical View Angle, CR>5, Typical	150°/145°	170°/170°	178°/178°
Backlight Life	50,000 hrs, Minimum		
Display Input Signal	Analog 15-Pin D-Sub, DVI-D		
Touch Screen (Optional - ATM1500T, ATM1700T and ATM1900T):			
Touch Screen Technology	5- Wire Analog Resistive		
Interface	USB 1.1 and Serial RS-232		
Resolution	4096 x 4096		
Positional Accuracy - Maximum Error	0.18" (4.6 mm)		0.19" (4.8 mm)
Positional Accuracy - Standard Deviation of Error	<.08" (<2.0 mm)		
Expected Life	>35,000,000 Activations		
Physical:			
Overall Monitor Dimensions H x W x D	12.80" x 15.80" x 2.65" (325.1 x 401.3 x 67.3)	14.48" x 17.14" x 2.85" (367.8 x 435.4 x 72.4)	15.70" x 18.66" x 2.95" (398.8 x 474.0 x 74.9)
Cutout Dimensions - H x W	12.00" x 15.00" (304.8mm x 381.0mm)	13.70" x 16.35" (348.0mm x 415.3mm)	14.90" x 17.75" (378.5mm x 450.9mm)
Weight	14.0 lbs (6.4 kg)	18.5 lbs (8.4 kg)	21 lbs (9.5 kg)
Shipping Weight	19 lbs (8.6 kg)	23.5 lbs (10.7 kg)	26 lbs (11.8 kg)
Electrical:			
AC Input Voltage	100 - 240 VAC, 50/60 Hz		
AC Input Current	0.5 A Maximum	1 A Maximum	
Input Power	≤ 25W	≤ 30W	≤ 35W

Specifications continued on next page.

Specifications cont'd

Part Number	ATM1500/ATM1500T	ATM1700/ATM1700T	ATM1900/ATM1900T
Specification			
Environmental:			
Operating Temperature	0 to 50 °C (32 to 122 °F)		
Storage Temperature	-20 to 60 °C (-4 to 140 °F)		
Operating and Storage Humidity	20% to 80% RH, noncondensing		
Operating Shock	15g peak acceleration, 11msec		
Operating Vibration 5-2000 Hz	0.006" peak to peak, 1g max		
Operating Altitude	Sea level - 10,000 feet		
Storage Altitude	Sea level - 40,000 feet		
Agency:			
Front Panel NEMA Rating	NEMA 4/4X/12, IP65		
FCC	47 CFR, Part 15, Class A		
EU Compliance	EN 55022: Class A, EN 61000-3-2: Class A, EN 61000-3-3, EN 61000-6-2, IEC 60950-1		
Safety Agency Approvals	UL 508 Listed (file #E157382), ANSI/ISA 12.12.01-2012 Listed* (file #E200031), cUL Listed CSA C22.2, #142, CSA C22.2, #143*		
* Suitable for use in Class I, Division 2, Groups A, B, C and D, Class II, Division 2, Groups F and G, Class III Hazardous Locations or Non-Hazardous locations only.			
For use on a flat surface of a type 1, 4, 4X or 12 enclosure with provisions for Class I Division 2 wiring methods			
Temperature Code: T5			



NOTE: Suitable for use in Class 1, Division 2, Groups A, B, C and D hazardous locations, or nonhazardous locations only.



WARNING – EXPLOSION HAZARD – Substitution of any components may impair suitability for Class 1, Division 2.



WARNING – EXPLOSION HAZARD – Do not disconnect equipment while the circuit is live unless the area is known to be free of ignitable concentrations.

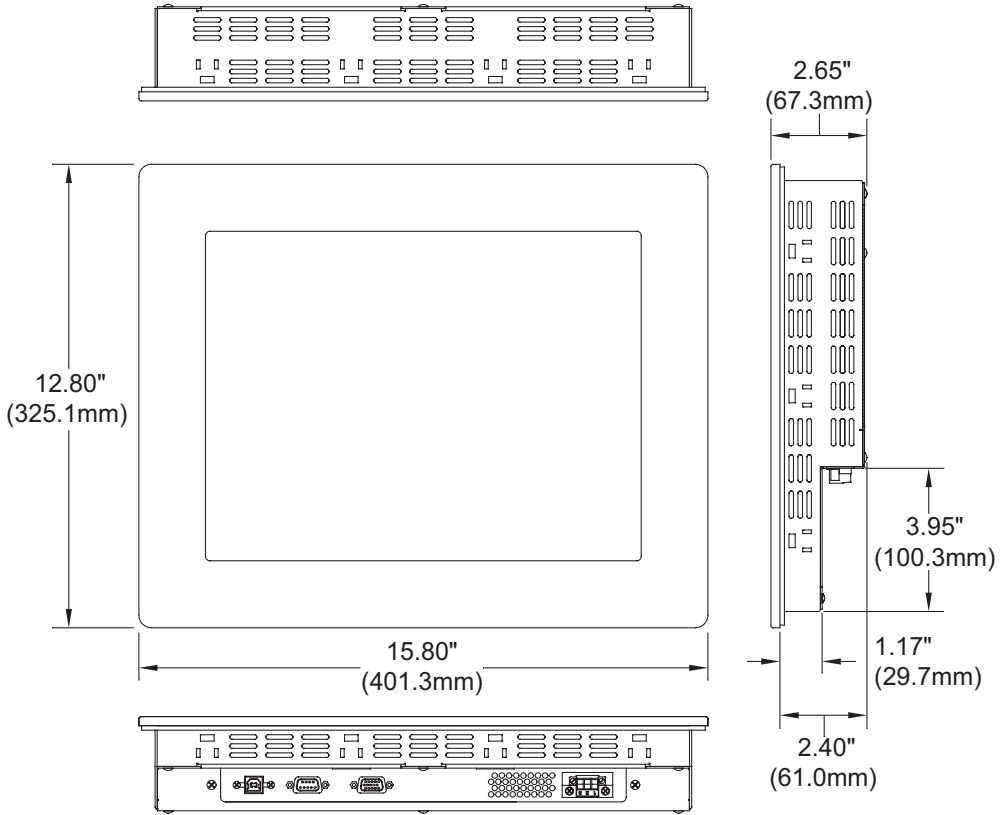


WARNING – EXPLOSION HAZARD – Do not disconnect the USB ports unless the power has been switched off and the area is known to be non-hazardous.

Front and Side Views of Monitors

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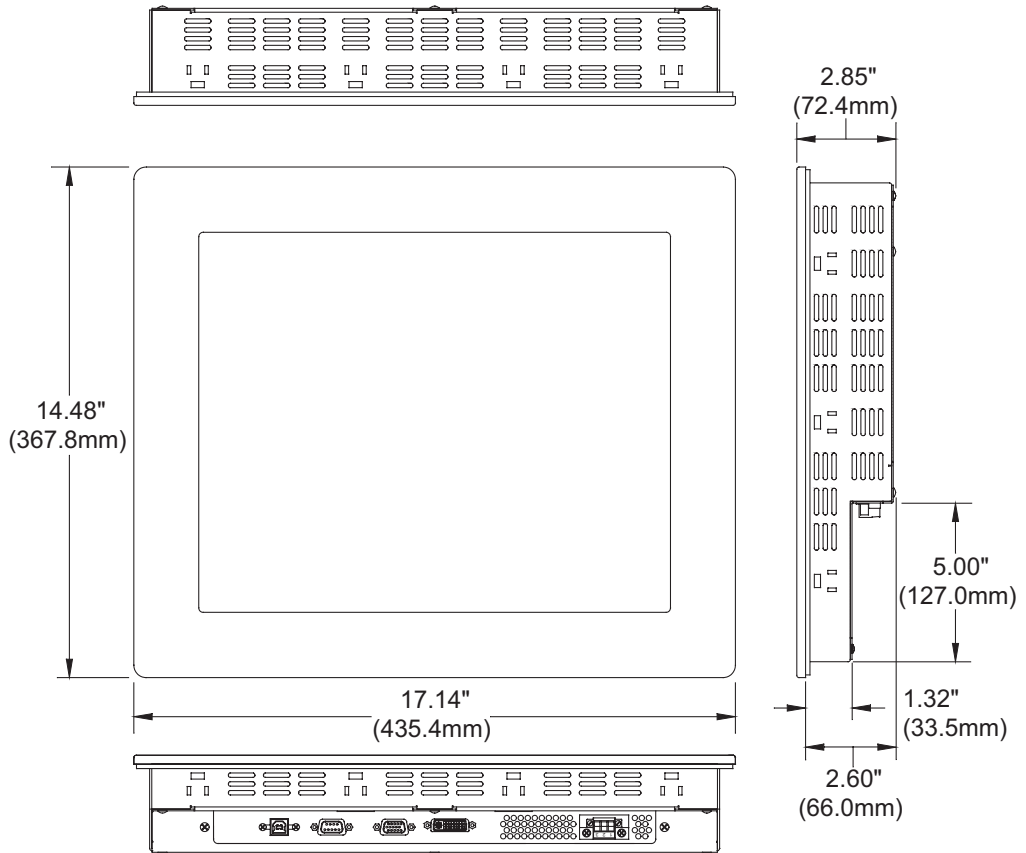
ATM1500/ATM1500T



Front and Side Views of Monitors cont'd

ATM1700/ATM1700T

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Front and Side Views of Monitors cont'd

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ATM1900/ATM1900T

