



## 7.0" ~ 23.8" Fanless Industrial CEFC FC Panel PC With Intel® Celeron® J6412 Processor

- UL Listed
- Microsoft Windows® 10, 11, Linux® OS Options
- Projected Capacitive Touch
- Rugged IP66 Rated Aluminum Enclosure

	CPU	Intel <sup>®</sup> Celeron <sup>™</sup> ElkHart Lake <sup>™</sup> J6412 Quad-Core 2.0 GHz Processor					
Systom	System Chipset	SoC					
System	System Memory Options	1x DDR4 260-pin SO-DIMM RAM (8, 16, 32 GB)					
	TPM Chip	Yes (TPM 2.0 onboard)					
	USB	2 x USB 3.2 type A 2 x USB 2.0 type A					
			,,	2 x USB 3.2 type A			
	Serial	1 x DE9P RS-232		1 x DE9P RS-232/422/485, COM1 (default RS-232) 1 x DE9P RS-232, COM2			
	Audio	(default RS-232) 1 x DE9P RS-232, COM2					
I/O Ports		1 x GbE RJ-45					
no rons	LAN	1 x 2.5 GbE RJ-45					
	Wireless LAN	2 x Wireless LAN Antenna ports (covered unless optional Wi-Fi Expansion kit purchased)					
	Power	3-pin Terminal Block type, DC power input					
	Remote Power Switch	N/A					
	External Display	1 x DisplayPort 1.4 (max 4096 x 2160 pixels @ 60Hz)					
Expansion	Expansion Slot	Optional Wi-Fi kit (IEEE802.11ax card and 2 x antenna, Bluetooth 5.2 Support)					
Touch Screen	Туре	Projected Capacitive Touch (Multi-Touch Supported)					
	Interface	USB 90+%					
	Light Transmission	7.0" WVGA TFT LCD	8.0" SVGA TFT LCD	+% 10.1" WXGA TFT LCD	12.1" XGA TFT LCD		
	Display Type Max. Resolution	800 x 480	800 x 600	1280 x 800	1024 x 768		
	Max. Color	262K	262K	16.7M	16.2M		
	Luminance (cd/m²)	350	450	350	500		
Display	View Angle (H°/V°)	160/160	140/130	170/170	178/178		
	Contrast Ratio	1000:1	500:1	800:1	1000:1		
	Backlight Lifetime	40.000±	40 000±	30 000+	30 000±		
	(hours)	40,000+	40,000+	30,000+	30,000+		
	Solid State Drive Type	1 x M.2 2280 3D TLC SATA3					
Storage	Solid State Drive	128, 256, 512 GB, 1 TB, 2 TB SSD					
	Capacity Options SD Card Slot						
	Input Voltage	N/A 9-36 VDC 9-36 VDC 9-36 VDC 9-36 VDC					
Electrical	Input Current	0.75-3.0 A	0.78-3.11 A	0.78-3.11 A	0.92-3.67 A		
Licotrical	Input Power (max.)	27 W	28 W	28 W	33 W		
	Dimensions	7.95 x 5.87 x 2.28"	9.09 x 6.93 x 2.72"	11.22 x 7.44 x 2.95"	12.56 x 9.65 x 3.03"		
	(W x H x D)	[202 x 149 x 58 mm]	[231 x 176 x 69 mm]	[285 x 189 x 75 mm]	[319 x 245 x 77 mm]		
	Net Weight	~ 2.98 lbs [1.35 kg]	~ 4.85 lbs [2.2 kg]	~ 5.95 lbs [2.7 kg]	~ 7.28 lbs [3.3 kg]		
Mechanical	Panel Cutout	7.56 x 5.43"	8.74 x 6.57"	10.71 x 6.93"	11.93 x 9.02"		
	Dimensions (W x H)	[192 x 138 mm]	[222 x 167 mm]	[272 x 176 mm]	[303 x 229 mm]		
	Mounting Construction	Panel mounting, VESA 75 x 75 mm Panel mounting, VESA 100 x 100 mm					
	Operating Temperature	Die-cast Aluminum					
	Storage Temperature	-4~140°F [-20~60°C] -22~158°F [-30~70°C]					
	Relative Humidity	10 to 95% @ 40°C, non-condensing					
Environmental	Altitude (Air Pressure)	Up to 2,000 Meters (~80 kPa)					
Environmental	Shock Resistance	Tested to IEC 60068-2-27 (2008): 15G acceleration peak to peak, XYZ axis, 11ms pulse duration					
	Vibration Resistance	Tested to IEC 60068-2-64 (2019): 5~500Hz, 1.0 G <sub>rms</sub> , XYZ axis, 30 mins duration					
	Rating	IP66 / NEMA 4 when panel mounted					
	Certification	cULus / CE / FCC Class A / RoHS					
		Microsoft Windows® 10 IoT Enterprise Embedded LTSC 64-bit (EPKEA)  Microsoft Windows® 10 IoT Enterprise LTSC 64-bit (PKEA)					
Operating System Options	Microsoft Windows®	Microsoft Windows 10 101 Enterprise E13C 64-bit (EREA)  Microsoft Windows 11 IoT Enterprise Embedded GAC 64-bit (EPKEA)					
	Options	Microsoft Windows® 11 IoT Enterprise Canded GAC 64-bit (PREA)					
		Microsoft Windows® 11 Professional					
	Limone® Octalions	Linux® Ubuntu Desktop					
	Linux <sup>®</sup> Options	Linux® Ubuntu Server					
N							
Notes	Specifications subject to ch	nange without notice.					
	•						





#### 7.0" ~ 23.8" Fanless Industrial ( C € FC ) Panel PC With Intel® Celeron® J6412 Processor









- **UL** Listed
- Microsoft Windows® 10, 11, Linux® OS Options
- **Projected Capacitive Touch**
- Rugged IP66 Rated Aluminum Enclosure

L.						
	CPU	Intel® Celeron™ ElkHart Lake™ J6412 Quad-Core 2.0 GHz Processor				
Custom	System Chipset	SoC				
System	<b>System Memory Options</b>	1x DDR4 260-pin SO-DIMM RAM (8, 16, 32 GB)				
	TPM Chip	Yes (TPM 2.0 onboard)				
	·	2 x USB 2.0 type A				
	USB	2 x USB 3.2 type A				
		1 x DE9P RS-232/422/485, COM1 (default RS-232)				
	Serial	1 x DE9P RS-232, COM2				
	Audio	1 x 3.5 mm line out				
I/O Ports	LAN	1 x GbE RJ-45				
	LAN	1 x 2.5 GbE RJ-45				
	Wireless LAN	2 x Wireless LAN Antenna ports (covered unless optional Wi-Fi Expansion kit purchased)				
	Power	3-pin Terminal Block type, DC power input				
	Remote Power Switch	N/A				
	External Display	1 x DisplayPort 1.4 (max 4096 x 2160 pixels @ 60Hz)				
Expansion	Expansion Slot	Optional Wi-Fi kit (IEEE802.11ax card and 2 x antenna, Bluetooth 5.2 Support)				
	Type	Projected Capacitive Touch (Multi-Touch Supported)				
Touch Screen	Interface	USB				
	Light Transmission		90-	+%		
	Display Type	15.0" XGA TFT LCD	15.6" FHD TFT LCD	17" SXGA TFT LCD	18.5" FHD TFT LCD	
	Max. Resolution	1024 x 768	1920 x 1080	1280 x 1024	1920 x 1080	
	Max. Color	16.7M	16.7M	16.7M	16.7M	
Dienlay	Luminance (cd/m²)	350	500	350	350	
Display	View Angle (H°/V°)	178/178	178/178	160/140	178/178	
	Contrast Ratio	1000:1	1000:1	1000:1	1000:1	
	Backlight Lifetime	50,000+	50,000+	50,000+	50,000+	
	(hours)	30,000	,	<u> </u>	30,000	
	Solid State Drive Type		1 x M.2 2280 3	D TLC SATA3		
Storage	Solid State Drive	128, 256, 512 GB, 1 TB, 2 TB SSD				
Otorago	Capacity Options					
	SD Card Slot		N.			
	Input Voltage	9-36 VDC	9-36 VDC	9-36 VDC	9-36 VDC	
Electrical	Input Current	1.03-4.11 A	1.39-5.56 A	1.28-5.11 A	1.68-6.73 A	
	Input Power (max).	37 W	50 W	46 W	60.55 W	
	Dimensions	16.14 x 12.20 x 3.10"	16.22 x 10.93 x 3.07"	17.28 x 13.70 x 3.23"	19.67 x 12.39 x 3.23"	
	(W x H x D) Net Weight	[410 x 310 x 78.7 mm] ~ 11.02 lbs [5 kg]	[412 x 277.5 x 78 mm] ~ 9.26 lbs [4.2 kg]	[439 x 348 x 82 mm] ~ 13.22 lbs [6 kg]	[499.6 x 314.6 x 82 mm] ~ 15.21 lbs [6.9 kg]	
Mechanical	Panel Cutout	15.43 x 11.50"	15.51 x 10.24"	16.61 x 13.03"	18.98 x 11.69"	
Wechanical	Dimensions (W x H)	[392 x 292 mm]	[394 x 260 mm]	[422 x 331 mm]	[482 x 297 mm]	
	Mounting	Panel mounting, VESA 100 x 100 mm				
	Construction	Die-cast Aluminum				
	Operating Temperature					
	Storage Temperature	-4~140°F [-20~60°C] -22~158°F [-30~70°C]				
	Relative Humidity	10 to 95% @ 40°C, non-condensing				
	Altitude (Air Pressure)	Up to 2,000 Meters (~80 kPa)				
Environmental	Shock Resistance	Tested to IEC 60068-2-27 (2008): 15G acceleration peak to peak, XYZ axis, 11ms pulse duration				
	Vibration Resistance	Tested to IEC 60068-2-64 (2019): 5~500Hz, 1.0 G <sub>ms</sub> , XYZ axis, 30 mins duration				
	Rating	IP66 / NEMA 4 when panel mounted				
	Certification	cULus / CE / FCC Class A / RoHS				
		Microsoft Windows® 10 IoT Enterprise Embedded LTSC 64-bit (EPKEA) Microsoft Windows® 10 IoT Enterprise LTSC 64-bit (PKEA)				
	Microsoft Windows®					
Operation	Options	Microsoft Windows <sup>®</sup> 11 IoT Enterprise Embedded GAC 64-bit (EPKEA)  Microsoft Windows <sup>®</sup> 11 IoT Enterprise GAC 64-bit (PKEA)				
Operating	Options					
System Options		Microsoft Windows® 11 Professional				
	Linux® Options	Linux <sup>®</sup> Ubuntu Desktop Linux <sup>®</sup> Ubuntu Server				
Notes			<u> </u>	<u> </u>		
Notes	Specifications subject to ch	nange without notice.				
	<u> </u>					



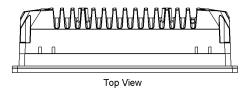


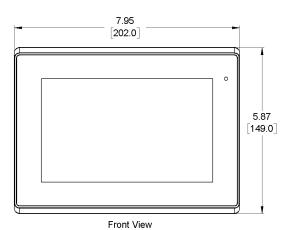
# 7.0" ~ 23.8" Fanless Industrial CECE Simple Panel PC With Intel® Celeron® J6412 Processor

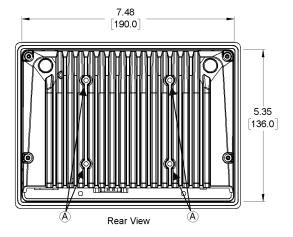
- UL Listed
- Microsoft Windows® 10, 11, Linux® OS Options
- Projected Capacitive Touch
- Rugged IP66 Rated Aluminum Enclosure

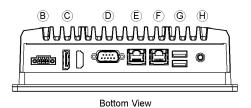
			TM				
	CPU	Intel <sup>®</sup> Celeron <sup>™</sup> ElkHart Lake <sup>™</sup> J6412 Quad-Core 2.0 GHz Processor					
System	System Chipset	SoC					
	System Memory Options	1x DDR4 260-pin SO-DIMM RAM (8, 16, 32 GB)					
	TPM Chip	Yes (TPM 2.0 onboard)					
		2 x USB 2.0 type A					
	USB	2 x USB 3.2 type A					
		1 x DE9P RS-232/422/485, COM1 (default RS-232)					
I/O Ports	Serial	1 x DE9P RS-232, COM2					
	Audio	1 x 3.5 mm line out					
		1 x GbE RJ-45					
	LAN	1 x 2.5 GbE RJ-45					
	Wireless LAN	2 x Wireless LAN Antenna ports (covered unless optional Wi-Fi Expansion kit purchased)					
	Power	3-pin Terminal Block type, DC power input					
	Remote Power Switch	N/A					
	External Display	1 x DisplayPort 1.4 (max 4096 x 2160 pixels @ 60Hz)					
Expansion	Expansion Slot						
Expansion		Optional Wi-Fi kit (IEEE802.11ax card and 2 x antenna, Bluetooth 5.2 Support)					
Touch Screen	Type	Projected Capacitive Touch (Multi-Touch Supported)					
	Interface	USB					
	Light Transmission	40" CVCA TET LCD	90+%				
	Display Type	19" SXGA TFT LCD	21.5" FHD TFT LCD	23.8" FHD TFT LCD			
	Max. Resolution	1280 x 1024	1920 x 1080	1920 x 1080			
	Max. Color	16.7M	16.7M	16.7 M			
Display	Luminance (cd/m²)	350	300	250			
Diopias	View Angle (H°/V°)	170/160	178/178	178/178			
	Contrast Ratio	1000:1	1000:1	3000:1			
	Backlight Lifetime	50,000+	50,000+	30,000+			
	(hours)		,	00,000			
	Solid State Drive Type		1 x M.2 2280 3D TLC SATA3				
Storage	Solid State Drive	128, 256, 512 GB, 1 TB, 2 TB SSD					
Giorago	Capacity Options						
	SD Card Slot		N/A				
	Input Voltage	9-36 VDC	9-36 VDC	9~36 VDC			
Electrical	Input Current	1.39-5.56 A	1.03-4.11 A	1.19-4.78 A			
	Input Power (max).	50 W	37 W	43 W			
	Dimensions	18.43 x 14.96 x 3.23"	21.94 x 14.26 x 3.23"	25.20 x 15.55 x 3.46"			
	(W x H x D)	[468 x 380 x 82 mm]	[557.3 x 362.3 x 82 mm]	[640 x 395 x 88 mm]			
	Net Weight	~ 15.94 lbs [7.2 kg]	~ 15.21 lbs [6.9 kg]	~ 20.79 lbs [9.4 kg]			
Mechanical	Panel Cutout	17.72 x 14.25"	21.22 x 13.54"	23.62 x 14.25"			
	Dimensions (W x H)	[450 x 362 mm]	[539 x 344 mm]	[600 x 362 mm]			
	Mounting	Panel mounting, VESA 100 x 100 mm					
	Construction	Die-cast Aluminum					
	Operating Temperature	-4~140°F [-20~60°C] 32~122°F [-0~50°C]					
	Storage Temperature	-22~158°F [-30~70°C]					
	Relative Humidity	<u> </u>	10 to 95% @ 40°C, non-condensing				
Environmental	Altitude (Air Pressure)		Up to 2,000 Meters (~80 kPa)				
Liivii Oiliileillai	Shock Resistance		8): 15G acceleration peak to peak,				
	Vibration Resistance	Tested to IEC 60068-2-64 (2019): 5~500Hz, 1.0 G <sub>ms</sub> , XYZ axis, 30 mins duration					
	Rating	IP66 / NEMA 4 when panel mounted					
	Certification	cULus / CE / FCC Class A / RoHS					
			s <sup>®</sup> 10 IoT Enterprise Embedded LTS				
	Microsoft Windows®	Microsoft Windows® 10 IoT Enterprise LTSC 64-bit (PKEA)					
Operating System Options	Options	Microsoft Windows® 11 IoT Enterprise Embedded GAC 64-bit (EPKEA)					
	•	Microsoft Windows® 11 IoT Enterprise GAC 64-bit (PKEA)					
		Microsoft Windows® 11 Professional					
	Linux® Options	Linux® Ubuntu Desktop					
	Linux Options		Linux® Ubuntu Server				
	-						
Notes	Specifications subject to ch	nange without notice.					
	,,,						

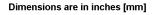


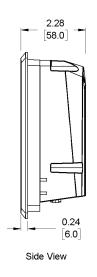


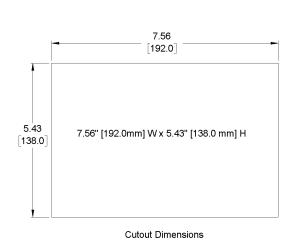






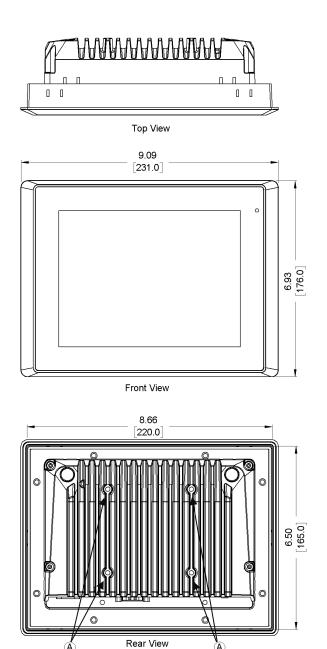






- A VESA 75 mm Screw Holes
- **B** Power Connector
- C DisplayPort
- D DE9P COM Port (Configurable)
- E 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- H 3.5mm Line-Out





E F G H

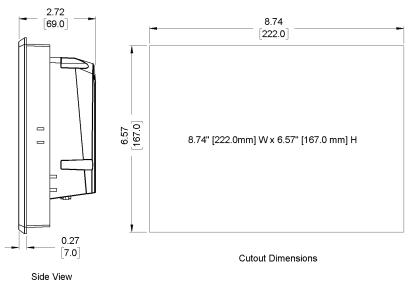
**Bottom View** 

0 0

(B) (C)

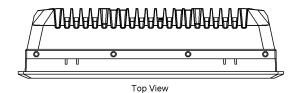
0 0



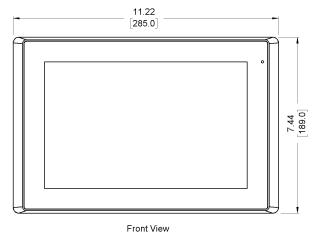


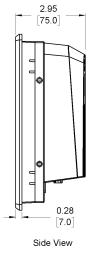
- A VESA 75 mm Screw Holes
- **B** Power Connector
- C DisplayPort
- D DE9P COM Port (Configurable)
- E 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- H 3.5mm Line-Out

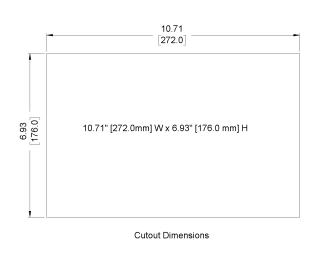


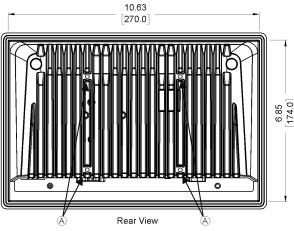


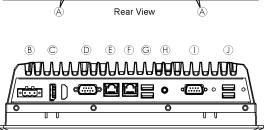
#### DIMENSIONS ARE IN INCHES [MM]











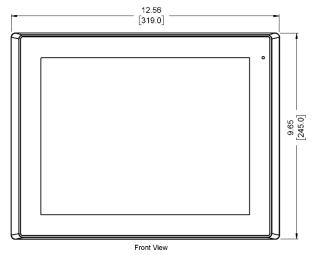
**Bottom View** 

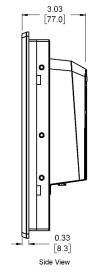
- A VESA 100 mm Screw Holes
- **B** Power Connector
- C DisplayPort
- D DE9P COM Port (Configurable)
- E 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- H 3.5mm Line-Out
- I DE9P COM Port (RS-232)
- J USB 2.0 Host Ports

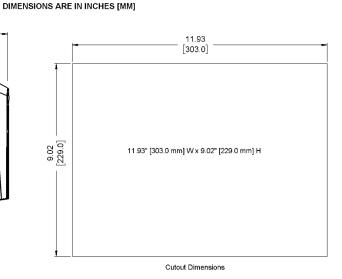


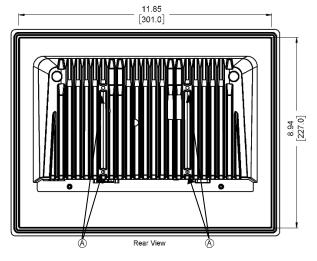


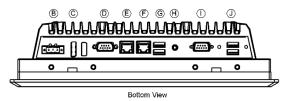
# Top View





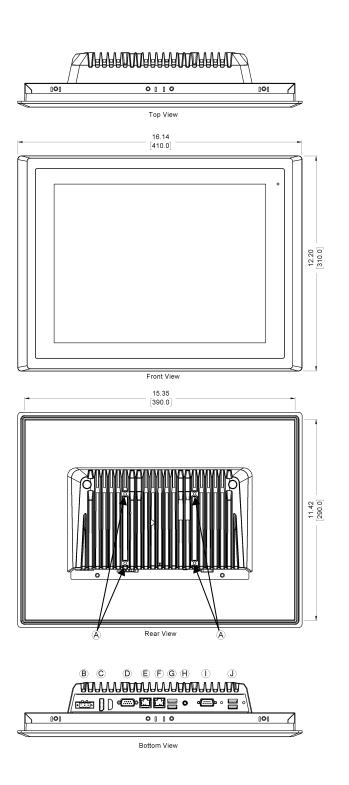




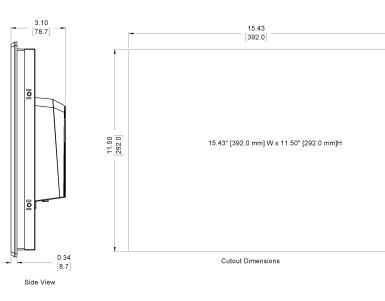


- VESA 100 mm Screw Holes
- **Power Connector** В
- C DisplayPort
- DE9P COM Port (Configurable) D
- Ε 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- Η 3.5mm Line-Out
- DE9P COM Port (RS-232)
- **USB 2.0 Host Ports**



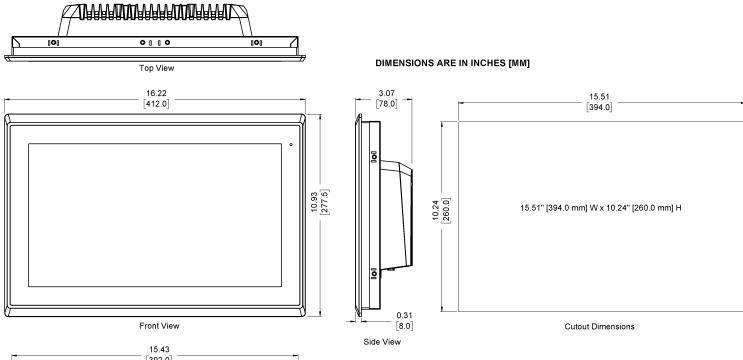


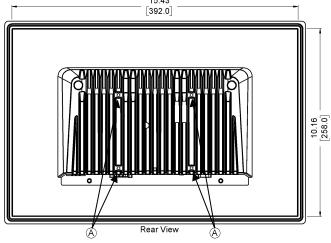
#### DIMENSIONS ARE IN INCHES [MM]

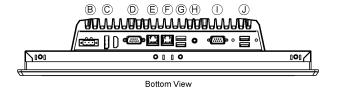


- A VESA 100 mm Screw Holes
- **B** Power Connector
- C DisplayPort
- D DE9P COM Port (Configurable)
- E 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- H 3.5mm Line-Out
- I DE9P COM Port (RS-232)
- J USB 2.0 Host Ports



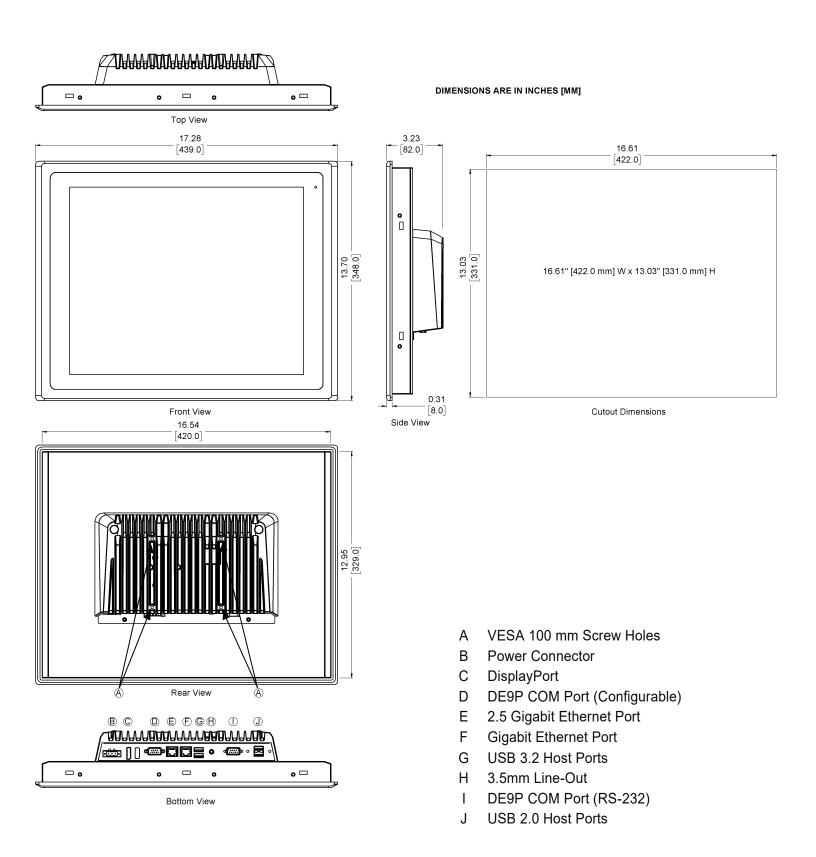




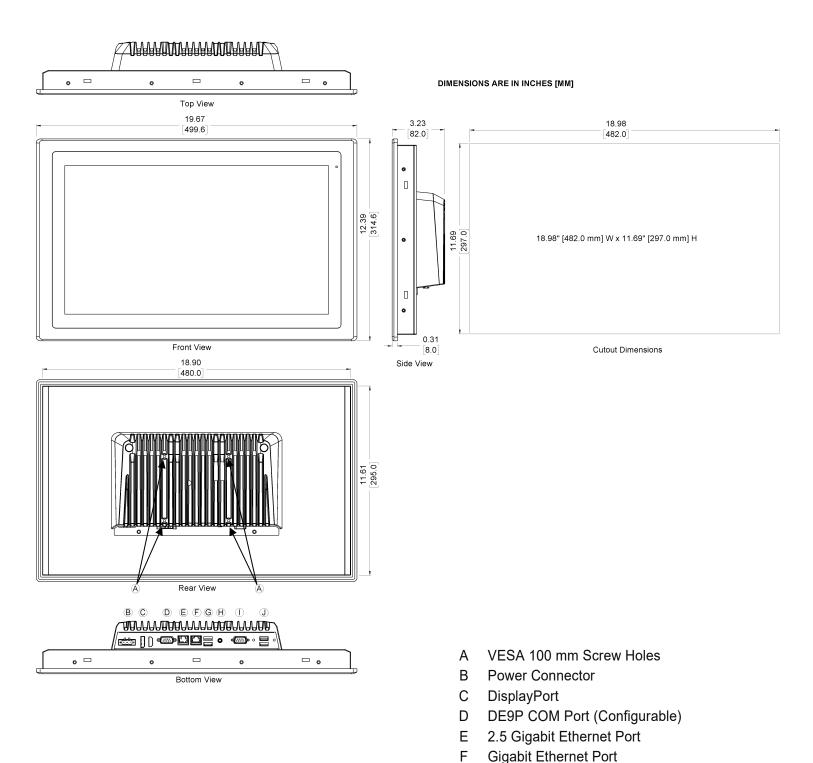


- A VESA 100 mm Screw Holes
- **B** Power Connector
- C DisplayPort
- D DE9P COM Port (Configurable)
- E 2.5 Gigabit Ethernet Port
- F Gigabit Ethernet Port
- G USB 3.2 Host Ports
- H 3.5mm Line-Out
- I DE9P COM Port (RS-232)
- J USB 2.0 Host Ports









G

Η

Ι

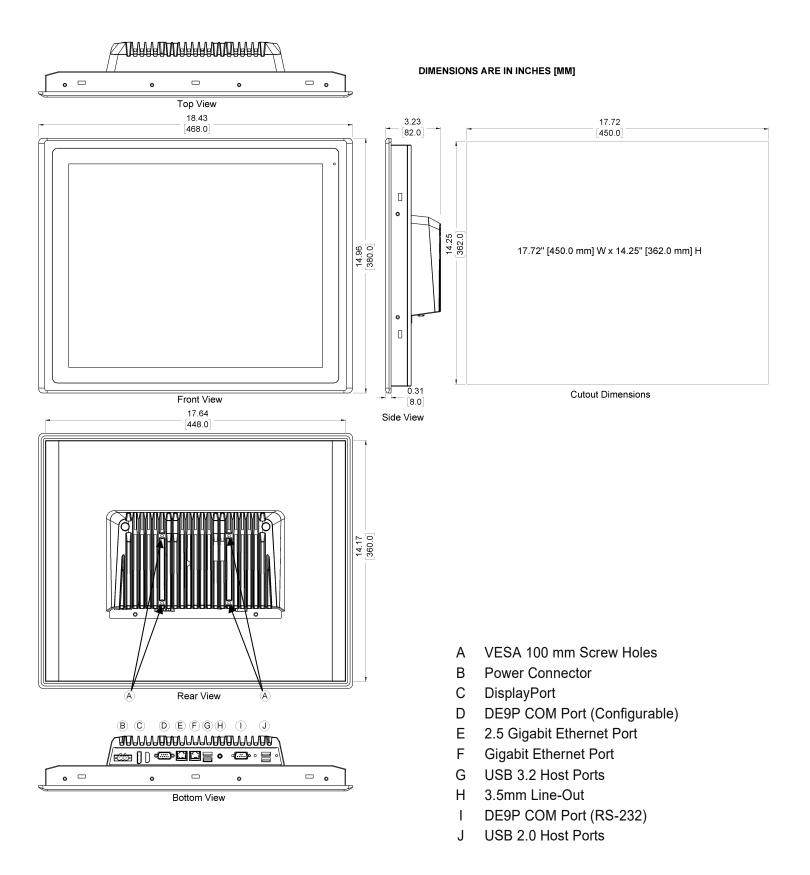
USB 3.2 Host Ports

**USB 2.0 Host Ports** 

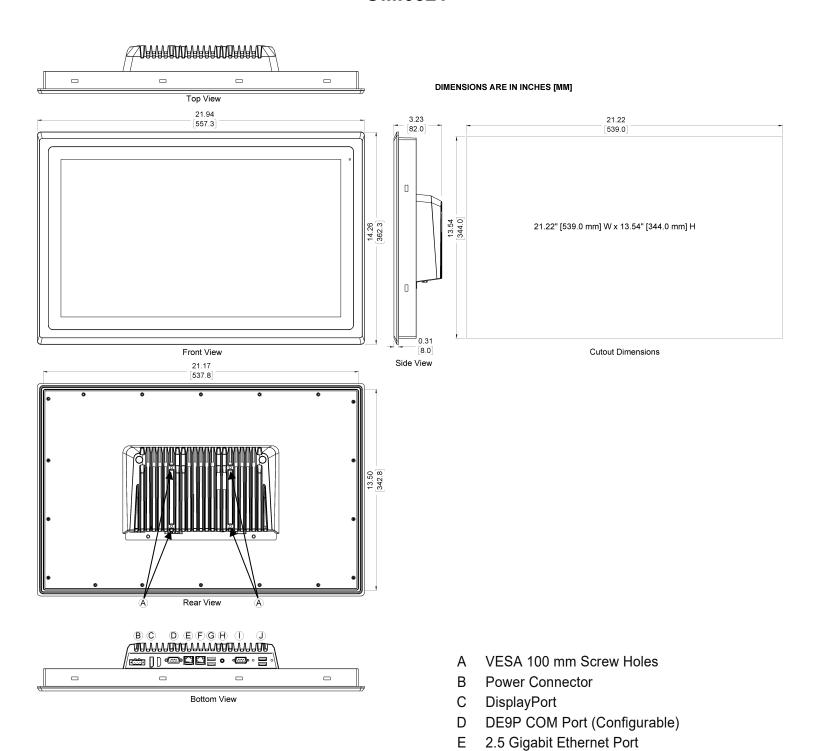
DE9P COM Port (RS-232)

3.5mm Line-Out









G

Η

I

**Gigabit Ethernet Port** 

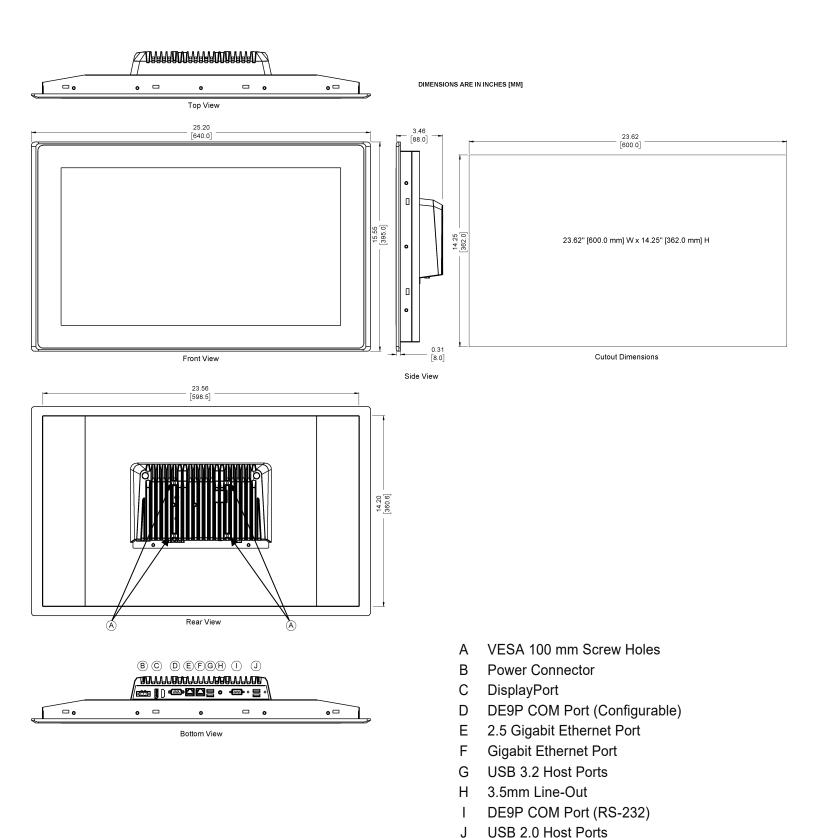
DE9P COM Port (RS-232)

USB 3.2 Host Ports

**USB 2.0 Host Ports** 

3.5mm Line-Out







### Why Buy A Maple Industrial PC

In addition to our powerful and affordable hardware, we'll also continue to support your company long after a sale. Wide product selection, large in-stock inventory, outstanding product warranty, free technical support and software, and in-house repairs with quick turnaround times, Maple Systems has your business covered.



## **Customize To Meet Your Needs**

Companies have chosen Maple Systems solutions over Allen-Bradley, Omron, Siemens, Panasonic, and so many others, in hundreds of applications, in every industry, and in every type of organization. Our Industrial PCs are designed to resolve your toughest automation challenges in manufacturing, processing, and fabrication environments, and because we offer thousands of different configurations, designing your IPC to meet your unique requirements is easy.

All our Industrial PCs are ideal for applications in industrial automation, healthcare, manufacturing, oil & gas, packaging, building automation, water, energy, agriculture, food & beverage, and more. Our offerings include high brightness/sunlight readable displays, extended temperature IPCs, stainless steel enclosures, and Class I, Div 2 certified IPCs. Learn more about the industries we serve and discover why more and more companies are choosing Maple Systems.

## **Supports Your 3rd Party Software**

Since our Industrial PCs can be configured with either a Windows™ or Linux™ Operating System, adding your own software is easy. Don't be tied to expensive industrial computers or HMIs just because of a name. Our IPCs support FactoryTalk®, Ignition SCADA®, Emerson Ovation®, Simatic SCADA®, Predator Touch HMI®, and hundreds of other HMI and SCADA software solutions.

We are a proud partner of Awardwinning AVEVA™ Edge. This powerful HMI/SCADA software package enables you to create custom industrial control applications for your unique industry, putting you in the driver's seat of creating your industrial process. With easy-to-use commands/ tool bars and a Microsoft Windows® programming environment, AVEVA™ Edge's feature-rich application puts you in the driver's seat of creating your industrial process. Learn more about AVEVA Edge.

#### **Build your SCADA**

We offer all the components you need to create your own unique level of supervisory data acquisition and control, from the simplest stand-alone machine to sophisticated multi-device networked production line(s), all the way to enterprise-level operations and IIoT functionalities leveraging cloud connectivity.

Our products can help you standardize communications between devices, gluing different systems together for one source to your SCADA. No need to redesign your entire application. Keep the components that are already working for you, just add Maple Systems components to grow your abilities to supervise, control, and acquire data.

**Application Story** 

#### **Pharmaceutical Equipment**

Adding a Maple Systems Stainless Steel Industrial Panel PC with Wi Fi to an existing machine saved this OEM time and money

This OEM manufacturer uses a Maple Systems Industrial Panel PC for their production-series tablet pressing machines. The rotary tablet press boasts features essential for successful mid-sized tableting without the full-scale price. This application required a cost effective 12" panel touch screen industrial PC with enough computing power for their custom software and reporting system. They also required the front bezel be stainless steel with a IP69K rating to meet washdown sanitization requirements. See how we support the **Pharmaceutical and Medical Industry**.



#### Case Study

#### Water / Wastewater Treatment

#### Our High Brightness Industrial Panel PC with Wi-Fi checked all the boxes for this System Integrator

During their large revamping of a utility control system, Aqua Sierra's customer North Tahoe Utilities needed a PCbased HMI to run a simple Wonderware SCADA project as an interface. The PC needed to allow 3rd party software logging and reporting tools for their utility management system. The control room facility is climate controlled with large windows and bright overhead lighting. The remote facility did not have Ethernet cabling out to the PC location, however there was a Wi-Fi router connection nearby. Read how we support the Water & Wastewater industry.

#### **Application Story**

#### Dairy / Agriculture Equipment

The Stainless Steel enclosure makes this Industrial Panel PC the right choice for the food and beverage industry

This customer is a leading OEM manufacturer of custom stainless steel processing equipment and a preferred provider of quality products and services to the cheese, dairy, food, beverage and other sanitary industries. The customer's dairy processing equipment required an IPC that operators can interface with while wearing gloves. Another major requirement is that the PC be IP69K washdown rated to endure the regular cleaning and disinfecting required; and for compliance and record keeping, the customer needed real time data logging and storage using a 3rd party historian application running on the PC. Read more about the Food & Beverage OEMs we support everyday.

