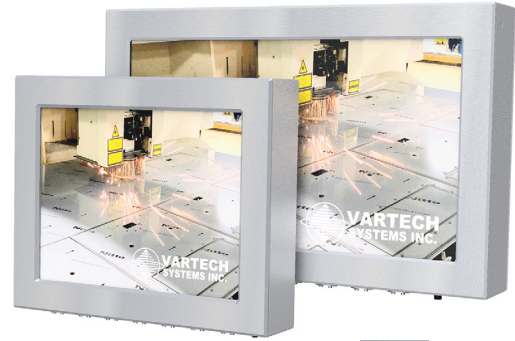


Fully sealed Class 1 Division 2 hazardous area monitors and computers are housed in industrial-grade stainless steel enclosures and equipped with sealed-gland I/O connectors.

VarTech's ToughStation Series of hazardous area certified monitors and computers are fully sealed and NEMA 4X (IP66) protected from dirt and moisture. These units are non-incendive, ignition resistant against flammable gas, vapors, or dust under normal working conditions in CID2 hazardous area environments. The rugged gasket-sealed stainless steel enclosure offers a fanless, low power consumption industrial-grade design for reliable Hazloc HMI visibility and operations throughout a variety of harsh environments.



Available in stainless steel

### Certifications:

This VarTech product has been tested, examined, by a third party independent testing laboratory and found to comply with the applicable requirements of UL60950-1/CSA C22.2 No. 6095-1, Second Edition, Rev. March 27, 2007: Information Technology Equipment – Safety – Part 1: General Requirements ANSI/ISA 12.12.01-2013, 3 June 2013: Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations CSA C22.2 No. 213-M1987, First Edition, Reaffirmed 1999: Nonincendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.

### Standard features:

#### Monitor features:

- Industrial-grade LED back-lit LCD
- Mounting configuration: panel with studs, console, and 100 mm VESA pattern
- Construction/environmental design: CID2 certified, fully sealed, NEMA 4X (IP66) protection, 316 stainless steel enclosure with anodized aluminum rear cover. Available with heat sink, if required.
- Available touchscreens: resistive, PCAP
- Touchscreen interface: USB or serial connections
- Power input: 12/24 VDC or 110/220 VAC internal power supply
- I/O connection type: sealed Roxtec glands with captive cables (3' length standard power cable with bare leads, 6' length for all other cables)

- Max. I/O connectors: 10.4": Qty 5, 15" to 24": Qty 7
- Operating temperature: -20° to 60° C (Extreme Temperature Package available depending on size. Please inquire.)
- Relative humidity: ≤ 0% to ≤ 90%
- Altitude: 10,000 ft MSL
- 2-year warranty

#### Panel computer features: (includes all standard monitor features)

- Embedded computer
- Fanless design: solid-state components
- Operating system: Windows 10 Professional 64-bit (standard)

### Available LCD size and specification chart:

Size	VESA Mount Dimensions	Panel/Console Mount Dimensions	Brightness	Resolution	Touchscreen*	Viewing Angle	Contrast	Aspect Ratio	Power Consumption (Calculated at 12 V DC)	Approx. Weight**
10.4"	12 × 9.75 × 3.28	13.98 × 11.73 × 3.28	400 nits 1000 nits ☀	SVGA 800 × 600 XGA 1024 × 768	Res/PCAP	80°/80°/80°/80° 80°/80°/65°/65°	1000:1 700:1	4:3	≈ 11 W ≈ 24 W	≈ 13.9 Lbs
15"	15.38 × 12.38 × 3.19	17.36 × 14.36 × 3.19	400 nits 1500 nits ☀	XGA 1024 × 768 XGA 1024 × 768	Res/PCAP	80°/80°/80°/80° 80°/80°/60°/80°	600:1 800:1	4:3	≈ 12 W ≈ 47 W	≈ 18.15 Lbs
17"	17 × 14.5 × 3.21	18.98 × 16.48 × 3.21	350 nits 1000 nits ☀	SXGA 1280 × 1024 SXGA 1280 × 1024	Res/PCAP	80°/80°/60°/80° 80°/80°/60°/80°	800:1 1000:1	5:4	≈ 25 W ≈ 62 W	≈ 18.9 Lbs
19"	18.5 × 15.38 × 3.19	20.48 × 17.36 × 3.19	350 nits 1600 nits ☀	SXGA 1280 × 1024 SXGA 1280 × 1024	Res/PCAP	85°/85°/80°/80° 85°/85°/80°/80°	1000:1 1000:1	5:4	≈ 20 W ≈ 60 W	≈ 20.9 Lbs
21.5" wide	22.02 × 14 × 3.53	23.99 × 15.98 × 3.53	300 nits	FHD 1920 × 1080	Res/PCAP	89°/89°/89°/89°	5000:1	16:9	≈ 24 W	≈ 26 Lbs
24" wide	24.43 × 15.52 × 2.90	26.41 × 17.5 × 2.9	300 nits	FHD 1920 × 1080	PCAP	89°/89°/89°/89°	5000:1	16:9	≈ 9 W	≈ 28 Lbs

☀ Sunlight readable LCD

\*\* Weight may differ based on overall configuration

\* Res - resistive touch, PCAP - projective capacitive touch

### Certification model numbers:

Sizes	Computers			Monitors		
	VESA Mount	Panel Mount	Console Mount	VESA Mount	Panel Mount	Console Mount
10.4"	VTPC100VS	VTPC100VS-PN	VTPC100VS-CO	VTPC100VS-MON	VTPC100VS-PNMON	VTPC100VS-COMON
15"	VTPC500VS	VTPC500VS-PN	VTPC500VS -CO	VTPC500VS-MON	VTPC500VS-PNMON	VTPC500VS-COMON
17"	VTPC700VS	VTPC700VS-PN	VTPC700VS -CO	VTPC700VS-MON	VTPC700VS-PNMON	VTPC700VS-COMON
19"	VTPC900VS	VTPC900VS-PN	VTPC900VS -CO	VTPC900VS-MON	VTPC900VS-PNMON	VTPC900VS-COMON
21.5" wide	VTPC2100VS	VTPC2100VS-PN	VTPC2100VS -CO	VTPC2100VS-MON	VTPC2100VS-PNMON	VTPC2100VS-COMON
24" wide	VTPC2400VS	VTPC2400VS-PN	VTPC2400VS -CO	VTPC2400VS-MON	VTPC2400VS-PNMON	VTPC2400VS-COMON

**LCD controller board specifications:**

Option	Resolution	Available Video I/O Ports	Horizontal/Vertical Scan
A*	Up to 1440 x 900, 8-bit	1 x DVI, 1 x VGA	60 Hz up to 1440 x 900
B*	Up to 1600 x 1200, 8-bit	1 x DVI, 1 x VGA, 1 x Composite (PAL/NTSC)	60 Hz up to 1600 x 1200
C	Up to 1920 x 1200, 8-Bit	1 x HDMI, 1 x Display Port, 1 x VGA	60 Hz up to 1920 x 1200
D	Up to 1920 x 1200, 10-bit	1 x HDMI, 1 x DVI, 1 x VGA 1 x Composite (PAL/NTSC)	60 Hz up to 1920 x 1200

Non-standard controller boards and I/O ports available depending on panel size. Please inquire.

\* Not compatible with FHD screen resolution

**Available monitor options:**

- Optical bonding (VBOND): adhering a cover glass, protective overlay, or touchscreen to the front surface of the LCD using an optical-grade silicone to increase solar reflectivity and ruggedness.
- Wide temperature LCD panel
- Harsh duty video controller board or motherboard/SSD/RAM
- Button for input select

Environmental Functional Upgrade Packages available. See below.

**Standard motherboard specifications:**

Option	Processor	Memory	Storage Drive	Operating System	Available I/O Ports
E	Intel Atom E3845	Up to 8 GB	1 x SATA-300 1 x CFAST	Win 7: 32/64-bit, Win 10: 32/64-bit	1 x RS-232/422/485 2 x USB 2.0 2 x LAN
F	Intel Celeron J1900	Up to 8 GB	1 x SATA-300 1 x CFAST	Win 7: 32/64-bit, Win 10: 32/64-bit	1 x RS-232/422/485 2 x USB 2.0 2 x LAN
G	i5-7300U	Up to 16 GB	1 x SATA-300 1 x mSATA/SIM	Win 10: 64-bit	2 x RS-232/422/485 4 x USB 3.0 2 x LAN
H	Celeron G3900TE, i3-6100TE, i5-6500TE, i7-6700TE	Up to 32 GB	1 x SATA-600	Win 10: 64-bit	1 x RS-232/422/485 3 x USB 3.0 1 x USB 2.0 2 x LAN

Non-standard motherboards and processors available depending on panel size. Please inquire.

Motherboard selection may affect operational temperature

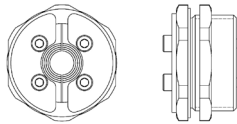
**Available computer options:**

- System memory: 4 GB to 32 GB (depending on the motherboard)
- Storage: HDD, SSD, removable drives, various capacities, multiple drives
- Operating system: Windows 10 Professional – 32 & 64-bit, Windows 10 Enterprise, Windows 7 – 32 & 64-bit, Linux (select versions of Linux supported)
- 1 x VGA, 1 x HDMI
- Additional and/or alternate I/O ports available: Please contact your sales representative

All available options are subject to mechanical design limitations. Please inquire.

**Standard I/O connectors: bottom or rear exit connectors**

Gland rated up to IP69K: standard sealed captive I/O cables for our hazardous area series

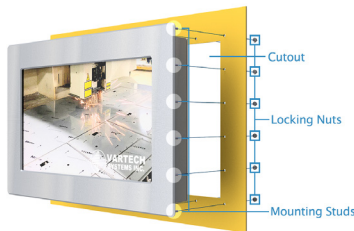


**Environmental Functional Upgrade Packages:**

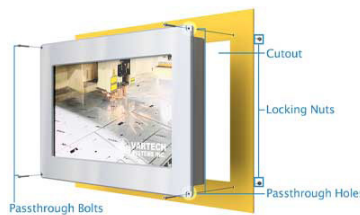
VarTech's Environmental Functional Upgrade Packages allow for custom COTS solutions using standard feature sets.

High Bright Sunlight Readable Package
<ul style="list-style-type: none"> <li>• High luminance LED backlights</li> <li>• Proprietary film stack</li> <li>• Optical bonding (VBOND)</li> <li>• Anti-reflective coatings</li> <li>• Brightness levels ranging from 700 nits to 1500 nits (depending on screen size)</li> </ul>

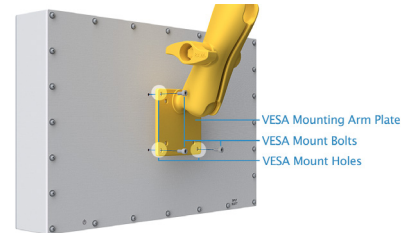
**Mounting option examples:**



Panel with studs



Console



VESA

**Over 30 Years of Rugged HMI and Industrial Computer Manufacturing Experience**

