

HTE Hazardous Ergonomic Kiosks

Industrial monitor and computer ergonomic kiosk for operator interface applications in Division 1 and Division 2 hazardous areas

The hazardous ergonomic kiosk has a friendly operator interface design and several rugged keyboard options to best suit your application and environment.

The purge system enables safe operations within Div 1 and Div 2 environments by preventing the accumulation of flammable gases and ignitable dust inside the enclosure. Using a purge and pressurization system is standard practice for the explosion protection of energized HMI terminals within a hazardous area.



Shown with Type-X Purge



Shown with Type-Z Purge



HTE standard in stainless steel or black powder coated aluminum. Custom colored powder coating available.



Standard Features:

- Industrial-grade LED back-lit LCD
- Mounting configuration: pedestal, mounting tabs, and swing arm/swivel mount
- Construction/environmental design: fully sealed, NEMA 4X (IP66) 316 stainless steel or NEMA 4 (IP65) powder coated aluminum enclosure
- Optical bonding (VBOND): laminated cover glass, protective overlay, or touchscreen to the front surface of the LCD. Used for reduced solar reflectivity, and shock and vibration protection.
- Hinged front enclosure door with quarter-turn cam locks
- Power input: 20-30 VDC or 100-250 VAC internal power supply
- I/O connection type: CID1 conduit hub required. CID2 conduit hub or optional sealed Roxtec glands with captive cables
- Operating temperature: -10° 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

Computer Features

- Embedded computer
- Solid-state components
- Available touchscreens: resistive, PCAP, and ArmorTouch
- Operating system: Windows 10 Professional 64-bit (standard)
- 2 × 10/100/1000 Mbps LAN

Dimensions (W × H × D) and Specification Chart:

Size	Enclosure Dimensions	Brightness	Resolution	Touchscreen*	Viewing Angle	Contrast	Aspect Ratio	Power Consumption (Calculated at 12 V DC)	Approx. Weight** † (Stainless Steel)	Approx. Weight** † (Aluminum)
15"	24.5" × 25.66" × 14"	400 nits 1500 nits ☀	XGA 1024 × 768 XGA 1024 × 768	Res/PCAP/AT	80°/80°/80°/80° 80°/80°/60°/80°	600:1 800:1	4:3	≈ 12 W ≈ 47 W	≈ 97 Lbs Type-X ≈ 72 Lbs Type-Z	≈ 77 Lbs Type-X ≈ 52 Lbs Type-Z
17"	24.5" × 25.66" × 14"	350 nits 1000 nits ☀	SXGA 1280 × 1024 SXGA 1280 × 1024	Res/PCAP/AT	80°/80°/60°/80° 80°/80°/60°/80°	800:1 1000:1	5:4	≈ 25 W ≈ 62 W	≈ 100 Lbs Type-X ≈ 75 Lbs Type-Z	≈ 80 Lbs Type-X ≈ 55 Lbs Type-Z
19"	24.5" × 25.66" × 14"	350 nits 1600 nits ☀	SXGA 1280 × 1024 SXGA 1280 × 1024	Res/PCAP/AT	85°/85°/80°/80° 85°/85°/80°/80°	1000:1 1000:1	5:4	≈ 20 W ≈ 60 W	≈ 102 Lbs Type-X ≈ 77 Lbs Type-Z	≈ 82 Lbs Type-X ≈ 57 Lbs Type-Z
21.5" wide	24.5" × 25.66" × 14"	300 nits 1500 nits ☀	FHD 1920 × 1080 FHD 1920 × 1080	Res/PCAP/AT	89°/89°/89°/89° 89°/89°/89°/89°	5000:1 1000:1	16:9	≈ 24 W ≈ 42 W	≈ 105 Lbs Type-X ≈ 80 Lbs Type-Z	≈ 85 Lbs Type-X ≈ 60 Lbs Type-Z

☀ Sunlight readable LCD

* Res - resistive touch, PCAP - projective capacitive touch, and AT - ArmorTouch glass-on-film resistive touch

** Weight may differ based on overall configuration

† Heatsink adds approximately 4 Lbs

Type X or Type Z Purge Systems Available:

Type X and type Z purge systems are available for Vartech's rugged monitors and panel computers. Type X purge systems reduce the classification of the protected monitor or panel computer enclosure from Div 1/Zone 1 to non-hazardous while type Z purge systems reduce the classification from Div 2/Zone 2 to non-hazardous.



Type X purge

This purge system reduces the hazard of Division 1/Zone 1 to unclassified within the protected enclosure, enabling use of general purpose, non-hazardous area equipment in a Class I and Class II, Division 1 (or Zone 1) location. *Only available on stainless steel enclosure.



Type Z purge

This purge system reduces the hazard of Division 2/Zone 2 to unclassified within the protected enclosure, enabling use of general purpose, non-hazardous area equipment in a Class I, Division 2 (Zone 2) location.

LCD Controller Board Specifications:

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

Non-standard controller boards and I/O ports available depending on panel size. Please inquire.
* Not compatible with FHD screen resolution

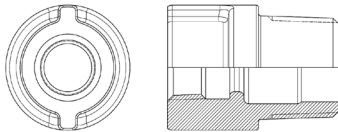
Standard Motherboard Specifications:

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

Non-standard motherboards and processors available depending on panel size. Please inquire.
Motherboard selection may affect operational temperature

Standard I/O Connectors: bottom or rear exit connectors

Sealing hub with gasket and locknut: used in our general purpose and hazardous area workstations



Available Options:

- Wide temperature LCD panel
 - Harsh duty video controller board or motherboard/SSD/RAM
 - Extreme temperature: -20° to 70° C (-4° to 158° F) available for select builds. Please inquire.
- Environmental Functional Upgrade Packages available. See below.

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)
- Additional and/or alternate I/O ports available: Please contact your sales representative

Monitor Options:

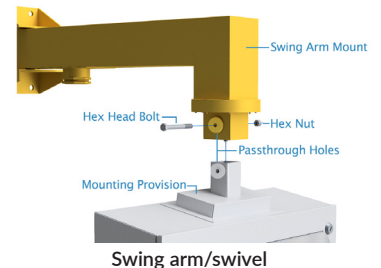
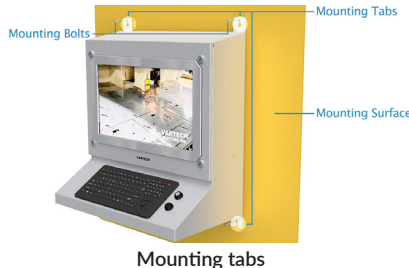
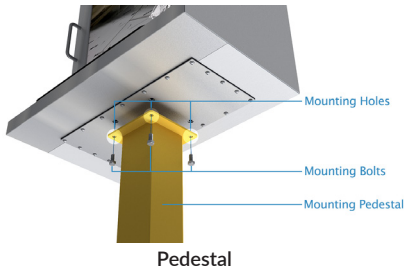
- Available touchscreens: resistive, PCAP, and ArmorTouch
 - Touchscreen interface: USB, or serial connections
- All available options are subject to mechanical design limitations. Please inquire.

Environmental Functional Upgrade Packages:

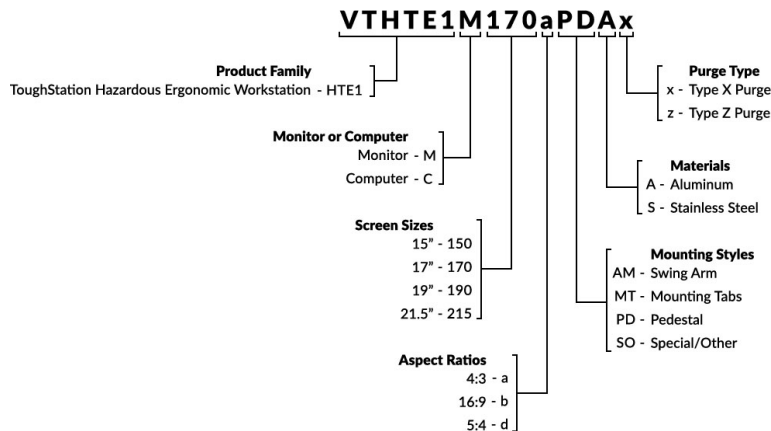
VarTech's Environmental Functional Upgrade Packages allow for custom COTS solutions using standard feature sets.

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

Mounting Option Examples:



Hazardous ToughStation Workstation Core Model Number Breakdown:



Over 30 Years of Rugged HMI and Industrial Computer Manufacturing Experience

