



## FS Series

FieldStation 15" rugged all-in-one computer system designed to support mission-critical field and ground-mobile applications.

VarTech's man-portable computer system is intended specifically for use in rugged military and blue light environments. Constructed to IP67 specifications, the computer can be deployed to support mission operations including access to satellite communication systems, field surveillance, enhanced situational awareness, and target acquisition radar.

The units can be manufactured with either an embedded or removable computer. The FieldStation can also be built to your specifications with up to 3, 1 x 6 function keypad switches embedded in the bezel, and up to 8 (including power), MIL-DTL 38999 I/O connectors in the rear of the unit.

Built to rugged MIL-Spec specifications.



Available in custom colored powder coated aluminum (NEMA 6). Standard colors displayed.



### Standard Features:

- Milled aluminum enclosure
- Custom colored powder coated finish
- High luminance LED backlights
- Proprietary film stack
- 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.
- Anti-reflective coating
- Brightness level 1500 nits
- Advanced wide range dimming ratio – from 100% to true black
- Vibration resistant low-profile video controller board or motherboard
- Low profile cable assemblies/connections
- Potted components where applicable
- Vibration dampening standoffs
- MIL-DTL 38999 I/O connectors

- Up to three 1 x 6 function keypad switches embedded around the display perimeter
- Maximum of 18 programmable key switches
- The membrane contact switch converts to a standard HID keyboard code
- Rear kickstand, with front-hinged hood and 1 x top handle
- Available touchscreens: PCAP and ArmorTouch
- Power input: 9-36 VDC internal power supply
- Operating temperature: -20° to 70° C (Extreme Temperature Package available)
- Relative humidity: ≤ 0% to ≤ 100%
- Altitude: 10,000 ft MSL
- Embedded or removable computer
- Solid-state components
- Operating systems: Windows 10 Professional 64-bit (standard)
- Dual removable storage drives in lieu of removable computer
- 2-year warranty

### Available Options:

- Private labeling: company logo or corporate identity for OEM/VAR applications
- Coatings: custom powder coats, conformal coatings, paint, and chemical resistant finishes, CARC paint
- Avionic bond: high altitude 40,000 ft MSL
- Video out
- Push-button dimmer, or auto-dimming
- Wireless connectivity: Bluetooth, WiFi, integrated router/WiFi repeater

- Expansions: PCIe, mPCIe, M.2, SIM card slot
  - 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, CentOS, RHEL, Ubuntu (supported)
  - 1 x VGA, 1 x HDMI, 1 x DisplayPort, RS-232/422/485, Fiber Optic LAN
  - Additional and/or alternate I/O ports available: Please contact your sales representative
- Environmental Functional Upgrade Packages available. See next page.*

### DoD Win 10 SHB Compliance:

- ✓ Trusted platform module (TPM)
- ✓ Credential guard

- ✓ UEFI secure boot
- Supported when equipped with Removable Computer*

### Dimensions (W x H x D) and Specification Chart:

Size	Dimensions	Brightness	Resolution	Touchscreen*	Viewing Angle	Contrast	Aspect Ratio	Power Consumption (Calculated at 12 V DC)	Approx. Weight**	Maximum I/O Ports Avail. (Including Power)
15"	18.25" x 12.5" x 2.59"	1500 nits ☀	XGA 1024 x 768	PCAP/AT	80°/80°/60°/80°	800:1	4:3	≈ 47 W	≈ 16.8 Lbs	8

☀ Sunlight readable LCD

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

\*\* Weight may differ based on overall configuration



**Standard Motherboard Specifications:**

Option	Processor	Memory	Storage Drive	Operating System	Available I/O Ports
A	Intel Atom E3845	Up to 8 GB	1 x SATA-300 1 x CFAST	Win 7: 32/64-bit, Win 10: 32/64-bit	2 x USB 2.0 2 x LAN
B	i5-8365UE i7-8365UE	Up to 32 GB	1 x SATA 6 G/s with 5 V SATA power connector	Win 10: 64-bit	4 x USB 3.1 3 x LAN

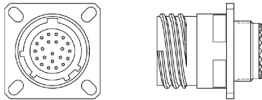
*Non-standard motherboards and processors available.  
Motherboard selection may affect operational temperature.*

**Removable Computer Specifications:**

Option	Processor	Memory	Storage Drive	Operating System	TPM	Available I/O Ports
C	Intel Atom E3845	8 GB	128 GB SSD	Win 10: 64-bit	1.2	4 x USB 2.0 1 x USB 3.0 1 x LAN
D	i7-8650U	16 GB	512 GB SSD	Win 10: 64-bit	2.0	4 x USB 2.0 1 x USB 3.0 1 x LAN

**Standard I/O Connectors:** rear exit connectors

MIL-DTL 38999: military standard, sealed, vibration and shock-resistant quick-coupling circular locking connectors

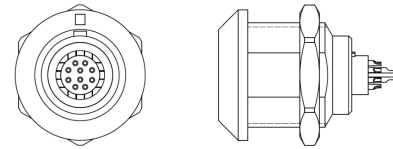


**Available Ruggedized I/O Connectors:**

M8/M12/M23: industrial automation, vibration and shock-resistant



IP67 push/pull locking style: standard connector for All-Weather series



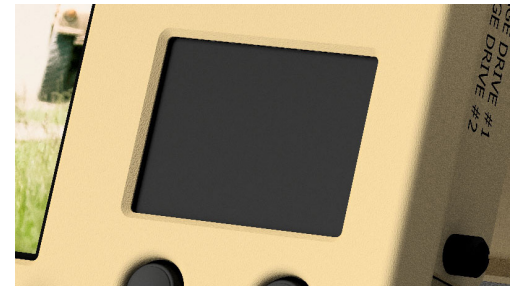
**Integrated Accessories:**



Removable Computer



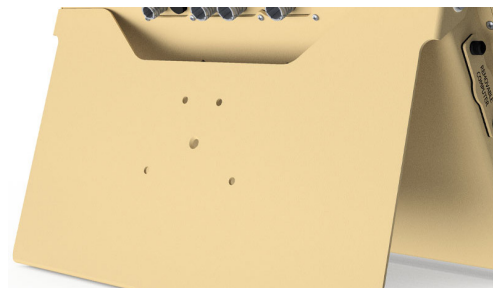
Removable Storage Drive



Laptop-Style Mouse Pad



Detachable Cover



Collapsible & Removable Kickstand



Rugged Carrying Handle

**Environmental Functional Upgrade Packages:**

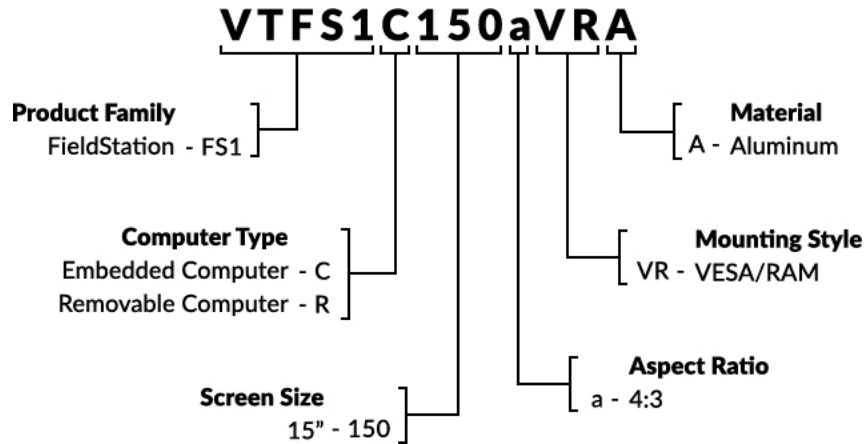
VarTech's Environmental Functional Upgrade Packages allow for custom COTS solutions using standard feature sets.

Extreme Temperature Package (-40°C to 70°C)	EMI/EMC 461 AS Package	NVIS Dual Mode Compatibility Package
<ul style="list-style-type: none"> <li>• Integrated heater and thermostat</li> <li>• Uninterrupted wide temperature dual PSU system</li> <li>• Wide temperature LCD panel</li> <li>• Harsh duty video controller board or motherboard/SSD/RAM</li> <li>• Optional heat-reflective white powder coat</li> </ul>	<ul style="list-style-type: none"> <li>• All Surface Ingress Protection Coupled with an All Surface Faraday Cage Design</li> <li>• Integrated 8 Ohm ITO/100 OPI Stainless Steel Mesh Protective Window or Touchscreen equipped with Conductive U Busbar (8 Ohm ITO for Surface Ships Limits/ 100 OPI SS Mesh for Army Ground Limits)</li> <li>• Chromated Metal and EMI Copper Conductive Tape to assure conductivity of Conductive Window/Busbar and Enclosure</li> <li>• Enhanced EMI Conductive Gaskets for MIL-STD 461 protection while maintaining seal up to IP67</li> <li>• MIL-DTL 38999 connectors with backshell assembly</li> <li>• Cable Braiding, Ferrites and in-line Bandpass filters where applicable</li> <li>• CE101, CE102, CS101, CS106, CS114, CS115, CS116, RE101, RE102, RS101, RS103 (Designed to Meet based on similar VarTech Systems Designs)</li> </ul>	<ul style="list-style-type: none"> <li>• NVIS MIL-STD 3009 class B green (night mode)</li> <li>• 4 nit brightness (night mode)</li> <li>• Toggle between day/night mode via the one-touch tactile button</li> <li>• Optional backlight kill switch</li> <li>• ITAR restrictions apply</li> </ul>

Impact Resistant Package
<ul style="list-style-type: none"> <li>• 6 mm impact-resistant protective overlay glass</li> <li>• 8H abrasion-resistant surface</li> <li>• Chemical stain resistant</li> <li>• Optional optically bonded PCAP touchscreen</li> </ul>

*Designed to meet by using best industry standards: tolerances specified by select subcategories of MIL-STD 810F and/or DEFSTAN 00-35 inclusive of Part 3 Issue 4*

**FieldStation Core Model Number Breakdown:**



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

