

DeltaV™ Workstation and Server Hardware



The DeltaV Operator Workstations are available to support multiple versions of DeltaV Systems.

- Pre-installed Operating System (O/S) software for ease of deployment
- Available with Windows 10, Windows 7, Server 2016 and Server 2008 R2
- Easy control network installation; all network cards pre-installed and ready to plug and play
- Choice of client and server workstation hardware to optimize your cost/performance
- Choices for tower and rack-mount computers including RAID drive options
- Supports single, dual, and quad monitors

Introduction

DeltaV software runs on a limited variety of Dell Intel-based computers. Available using workstation hardware with single, dual, or quad monitors, or using server hardware with a single monitor. The selection of DeltaV workstation and server hardware provides the performance you need to engineer your control strategy and operate your process.

DeltaV workstations run on a specific set of preselected Dell computer hardware specifically chosen to provide the best cost performance solution for your DeltaV system. We provide you with a guaranteed solution to deliver the performance required.

We have pre-tested the DeltaV system with both the hardware configuration and the O/S configuration so you can be sure that the DeltaV system will always operate correctly. You will never be bothered with incompatible drivers, bad or overwritten DLLs, or substandard hardware. You will not waste time in no-value system setup engineering and troubleshooting. Instead, you can focus on your process control functions.

Benefits

Pre-installed software. When ordered through a DeltaV system integrator that can pre-load the correct DeltaV software version, the pre-loaded workstation, monitor, keyboard, and mouse are delivered ready to plug and play in your DeltaV system. This is hassle-free hardware delivery. No third-party interfaces, compatibility problems, or software versions to worry you. A trouble-free system is guaranteed.

Easy control network installation. The workstation ships from the factory with the appropriate DeltaV control network cards preinstalled — no cases to open or network drivers to set up. Just plug a control network segment into the workstation and the other end into the DeltaV control area network (CAN), and you've just set up a new DeltaV network node.

Choose between PCs and servers to optimize your cost/performance. Some systems are served well with PC workstations. But when larger systems demand higher levels of performance, the servers provide exactly what you need.

Flexible options. Match our options with your requirements for towers, servers, dual monitors, and RAID storage. We provide recommendations, but the choice is yours. Either way, the O/S is pre-loaded and ready to roll.

DeltaV v13.3 and higher can only be installed on a 64-bit O/S. Move up to a Windows 64-bit O/S for both workstations and servers. Workstations and servers running Windows 10 and Server 2016 O/Ss can only be used with DeltaV v13.3.1 and higher.

Product Description

The workstation hardware described in this document is subject to improvements at any time. It is the policy of Emerson to ship workstation hardware that is current with industry standards.

We want you to enjoy the benefits of the increasing performance and decreasing costs inherent with using state-of-the-art, off-the-shelf equipment as much as possible. The DeltaV system performs testing to help eliminate the risks associated with new platforms, and we continue to focus on measures that extend the life of installed hardware.

Workstation and Server Hardware

Plenty of horsepower. All workstations use state-of-the-art processors well suited to provide the performance required for DeltaV software.

Lots of memory. All computers come with sufficient memory to handle DeltaV applications.

Secure data and fast recovery from hard drive failures. Workstations with RAID1 drives provide higher availability and fast recovery from failures. Servers in RAID 10 configurations maximize data protection and help enhance the performance of the server.

Crystal clear video. DeltaV software works at 1024 x 768, 1280 x 1024, 1680 x 1050 (DeltaV v10.3 and later), or 1920 x 1080 (DeltaV v13.3 and later) pixel resolution. DeltaV servers do not support 1920 x 1080 resolution. Please see monitors section for details. You can increase your viewing space with dual monitors or quad monitors.

Alarm annunciation. Audible alarms use the on-board sound cards included on the motherboards of all operator workstations. (Sound is not available on server-class computers.)

Legendary support. Emerson consistently receives top honors in service from our customers. This service is extended with a variety of optional support plans. When you subscribe to one of these plans, you are supplied with an external modem. This modem enables the factory to perform remote diagnostics on your workstation should the need arise.

Communications redundancy. The DeltaV system is solid, secure, and safe. The DeltaV control network is fully redundant, and the workstations are equipped to take advantage of this redundancy.

System backups. All workstations come with a DVD-RW drive that can be used for storing backup data.

Monitor options. Choose standard or widescreen flat panel monitors to display your process graphics. Choose dual or quad monitors for maximum viewing area.

Monitor Specifications

The DeltaV v11.3.1 and newer systems support widescreen monitors with a 16:10 aspect ratio up to 1680x1050 resolution.

The DeltaV v13.3 and newer systems support widescreen monitors with a 16:9 aspect ratio up to 1920x1080 resolution.

Note: DeltaV servers do not support 1080p (1920x1080) resolution.

The DeltaV system also supports a 19" monitor (5:4 aspect ratio 1280x1024 resolution only) on workstations and servers.

Wide screen monitors are supported on all DeltaV Workstations including server class computers as noted below. Wide screen monitors must be connected to the computer prior to making wide screen resolution selections. NOTE: The on-board video of servers may not support the same wide screen resolutions or aspect ratios as non-server workstations.

Order Number	DeltaV Compatibility	Description
SE2804	>=11.3	24-inch LED Widescreen Monitor - Dell UltraSharp Monitor U2412M; 16:10 Aspect Ratio; 1680x1050@60Hz Resolution; VGA/DVI/DP
SE2806	>=11.3	22-inch LED Widescreen Monitor - Dell Monitor P2217; 16:10 Aspect Ratio; 1680x1050@60Hz Resolution; VGA/HDMI/DP
SE2807	>=11.3	19-Inch LED Monitor - Dell Monitor P1917S; 5:4 Aspect Ratio; 1280x1024@60Hz Resolution; VGA/HDMI/DP
SE2808	>=13.3	24-inch LED Widescreen Monitor - Dell Monitor P2417H; 16:9 Aspect Ratio; 1920x1080@60Hz Resolution; VGA/HDMI/DP Note: DeltaV servers do not support 1080p
SE2809	>=13.3	43-inch LED Ultra HD 4K Quad Monitor - Dell Monitor P4317Q; Connect up to four independent clients to a single monitor; 16:9 Aspect Ratio; 3840 x 2160 at 60 Hz (DP only) Resolution; 1xVGA/2xHDMI/1xDP/1xmDP

Monitor physical appearances change periodically and without notice from monitor suppliers. We cannot guarantee that physically compatible monitors will be available at all times. If you require that any spare or replacement monitors be physically compatible with installed monitors, then spare or replacement monitors must all be ordered at the same time the initial workstation is ordered.

Touch screen is supported on DeltaV workstations however touch screen monitors are no longer supported as a standard offering. Monitors selected for touchscreen should match the aspect ratio and Optimal resolution of the supported monitors.

**Specifications Common to all Computers
(applies to all computers with exceptions noted under computer specifications)**

Please refer to the Emerson Product Support Guidelines for complete details on available DeltaV Workstation hardware and software support. Consult our local Emerson support office or representative or visit us at <http://www.emerson.com/deltav>.

All computers must be installed in a dust-free, contaminant-free environment. These computers are not suitable for mounting in industrial environments unless they are mounted in enclosures that provide the necessary dust-free and contaminant-free environment. Environment must meet **Class G1** level for airborne contaminants per the ISA standard **ISA-71.04-1985, Environmental Conditions for Process Measurement and Control Systems: Airborne Contaminants**.

It is the responsibility of the user to insure their environment is compatible with G1. Due to compliance to RoHS requirements newer computers may not survive in the same environment as older models. If there is any chance of sulfur in the environment, computers must be protected in environmental enclosures or relocated to a sulfur-free environment.

Temperature: Operating 10° to 35°C (50° to 95°F) Storage -40° to 65°C (-40° to 149°F)

Relative humidity: 20% to 80% (non-condensing)

Altitude: Operating -15.2 to 3048 m (-50 to 10,000 ft.), Storage -15.2 to 10,668 m (-50 to 35,000 ft.)

Computer restore image: All computers come with an O/S restore image DVD for fast recovery of the O/S when restoring a computer. O/S install disks are not provided.

Unless specifically listed in the individual computer specifications, floppy drives are no longer included with computers. Files can be transferred using portable USB media rather than floppy drives. If a floppy drive is required a USB floppy drive can be supplied locally.

Note on the use of Uninterruptible Power Supply (UPS) with DeltaV Workstations

For workstations and servers that will be used as a DeltaV ProfessionalPlus Workstation, the use of a UPS is **required to prevent possible database corruption due to a sudden power loss** on the ProfessionalPlus.

In addition, it is strongly suggested that all DeltaV Workstations including Operator workstations be connected to a UPS system to prevent possible corruption of the O/S, DeltaV software, or other data (such as historians) during a sudden power loss. Critical devices on the DeltaV network should always be protected by the use of a UPS system from possible damage due to sudden power loss.

DeltaV Operator Workstation – Single Monitor [based on Dell Optiplex XE2 desktop computer]

Model #	O/S	DeltaV Compatibility	Warranty
SE2541	Windows 7 Pro Embedded	DeltaV v11.3 and newer	3 Year
SE2601C01	Windows® 10 IoT Enterprise 2016	DeltaV v13.3.1 and newer	5 Year

- Small form factor chassis
- 3 Network Interface Ports
- Intel i5-4570S Quad Core w/HD Graphics 4600, 2.9 GHz
- Memory: 4.0GB
- Drives: 500GB or larger
- 8x slimline DVD +/- RW SATA drive
- On-board integrated audio
- On-board integrated video, HD Graphic 4600 (single-monitor only)
- Speakers
- USB optical mouse (2 button w/scroll)
- USB local country keyboard
- Local power cord option
- Dimensions (H x W x D) Inches/(cm) : 11.4 x 3.7 x 12.3 / (29.0 x 9.3 x 31.2)
- Weight (lbs/kg): 13.2 /6.0
- Power Supply Unit (PSU): 315W up to 90% Efficient PSU (80 PLUS Gold), Active PFC
- Maximum vibration: Operating 0.26 GRMS, Storage 0.26 GRMS.
- Maximum shock: Operating 40G, Storage 105G.
- The SE2541 ships with Windows 7 Pro for Embedded Systems 64-bit installed and includes a Windows 7, 32-bit and 64-bit image DVD to field convert the workstation to a 32-bit O/S. This computer will support both English and non-English versions of DeltaV DCS and includes the language MUI DVD required for installing a localized non-English version of DeltaV DCS.
- The SE2601C01 ships with Windows 10 Enterprise IoT 64-bit installed. This computer will support both English and non-English versions of DeltaV v13.3.1 software and includes the language packs required for installing a localized non-English version of DeltaV DCS.
- This unit does not come with a Windows 10 or 7 O/S reinstall DVD. The recovery image DVD is the only method available to reinstall the O/S on this computer. Note that this computer does not support the Windows XP O/S.



DeltaV Dual/Quad Monitor Workstation [based on Dell T5810 workstation]			
Model #	O/S	DeltaV Compatibility	Warranty
SE2537	Windows 7 Pro Embedded	DeltaV v11.3 and newer	3 Year
SE2602C01	Windows® 10 IoT Enterprise 2016	DeltaV v13.3.1 and newer	5 Year

- 3 Network Interface Ports
- USB ports: 10 ports - 4 front and 6 rear
- Intel® Xeon® E5-2603 v3 Quad-Core processor, 2.8 GHz
- Memory: 8GB
- Drives: 2 - 500GB hard-drives in a RAID 1 configuration
- 8x DVD +/- RW Drive
- On-board integrated audio
- Video: Qty-2 AMD FirePro W2100 dual video graphics cards (for quad monitor capability)
- Each video card provides 2- DisplayPort outputs. 4x Display port to DVI adapters are included. There are no VGA ports available on the video card. If VGA outputs are required a DisplayPort to VGA adaptor must be purchased locally
- AX210 USB Stereo Speakers
- USB optical mouse (2 button w/scroll)
- Local USB country keyboard (for languages supported)
- Local power cord option
- Chassis: Convertible Mini-tower
- (H x W x D): 16.3" x 6.8" x 18.54" (H x W x D): 41.4cm x 17.3cm x 47.1cm
- Weight: 29.1 lb. (16.3 kg)
- Power—685-watt power supply
- Please see Dell T5810 documentation for detailed environmental specifications.
- The SE2537 ships with Windows 7 Pro for Embedded Systems 64-bit installed and includes a Windows 7, 32-bit and 64-bit image DVD to field convert the workstation to a 32-bit O/S. This computer will support both English and non-English versions of DeltaV DCS and includes the language MUI DVD required for installing a localized non-English version of DeltaV DCS.
- The SE2602C01 ships with Windows 10 Enterprise IoT 64-bit installed. This computer will support both English and non-English versions of DeltaV v13.3.1 software and includes the language packs required for installing a localized non-English version of DeltaV DCS.
- This unit does not come with a Windows 10 or 7 O/S reinstall DVD. The recovery image DVD is the only method available to reinstall the O/S on this computer. Note that this computer does not support the Windows XP O/S.

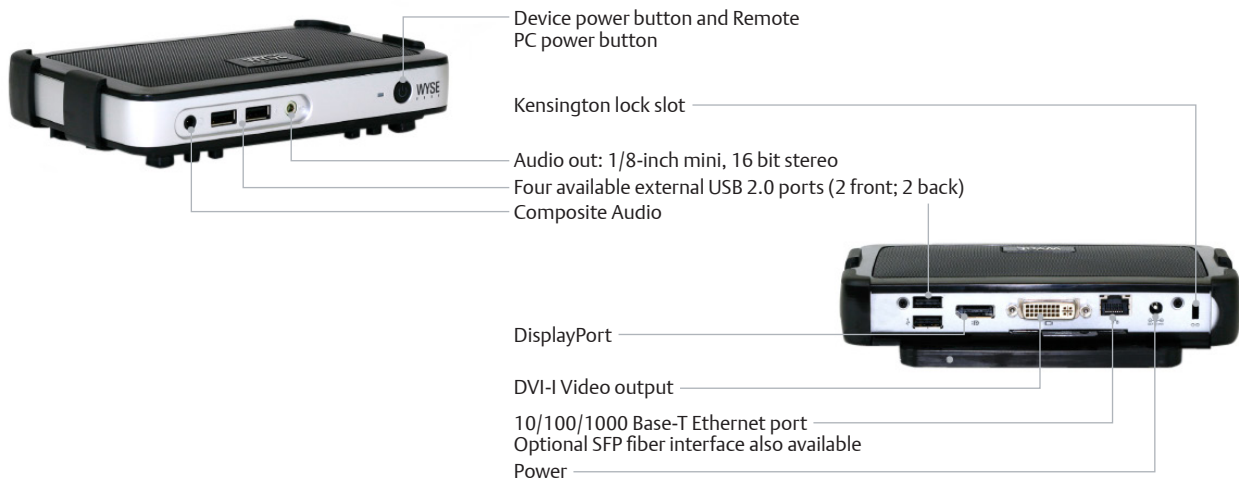


DeltaV Rack Mount Single/Dual/Quad Monitor Workstation [based on Dell R7910XL]			
Model #	O/S	DeltaV Compatibility	Warranty
SE2534C2	Windows 7 Pro Embedded	DeltaV v11.3 and newer	3 Year
SE2603C01	Windows® 10 IoT Enterprise 2016	DeltaV v13.3.1 and newer	5 Year

- 4 network interface ports
- USB ports: 4 ports - 2 front and 2 rear
- CPU: Single Intel Xeon Quad Core processor
- Memory: 8GB
- Drives: 2x- 500GB 2.5" Serial ATA 7200rpm in a RAID 1 configuration
- 8x DVD +/- RW Drive
- Audio: Creative Sound Blaster Audigy FX Model SB1570
- Video: AMD W5100 graphics card (quad-monitor capable). 4x display port to DVI adapters. **NOTE: the on-board VGA port is disabled and there is no HDMI port on the SE2534.**
- TERA2 Card. **NOTE: The TERA2 card supports but does not include SE2500KIT-3, the Wyse 5030 (P25) PCoIP Zero Client KVM Extender for dual monitors or SE2500KIT-4, the Wyse 7030 (P45) PCoIP Zero Client KVM Extender for quad monitors. See the Wyse 5030 (P25) and Wyse 7030 (P45) specs below.**
- Speakers: AX210 USB speakers
- USB optical mouse (2 button w/scroll), local USB country keyboard, local power cord option
- Rack Rails: Rack chassis with ReadyRails and Cable Management Arm
- Chassis: 2U rack mount
- Height: 3.44 in (8.73cm), width: 18.98in (48.2 cm), depth: with front bezel 29.75 in (75.58cm)
- Weight(minimum): With front bezel 69.23 lb. (31.4 kg)
- Power supply: dual redundant power supplies (hot swappable). Each supply 1100W 92% plus efficiency maximum heat dissipation for 1100W power supply: 1819.1 BTU/hr. with 15 amp power cables
- Please see Dell R7910 documentation for detailed environmental specifications
- The SE2534C2 ships with Windows 7 Pro for Embedded Systems 64-bit installed and includes a Windows 7, 32-bit and 64-bit image DVD to field convert the workstation to a 32-bit O/S. This computer will support both English and non-English versions of DeltaV DCS and includes the language MUI DVD required for installing a localized non-English version of DeltaV DCS.
- The SE2603C01 ships with Windows 10 Enterprise IoT 64-bit installed. This computer will support both English and non-English versions of DeltaV v13.3.1 software and includes the language packs required for installing a localized non-English version of DeltaV DCS.
- This unit does not come with a Windows 10 or 7 O/S reinstall DVD. The recovery image DVD is the only method available to reinstall the O/S on this computer. Note that this computer does not support the Windows XP O/S.

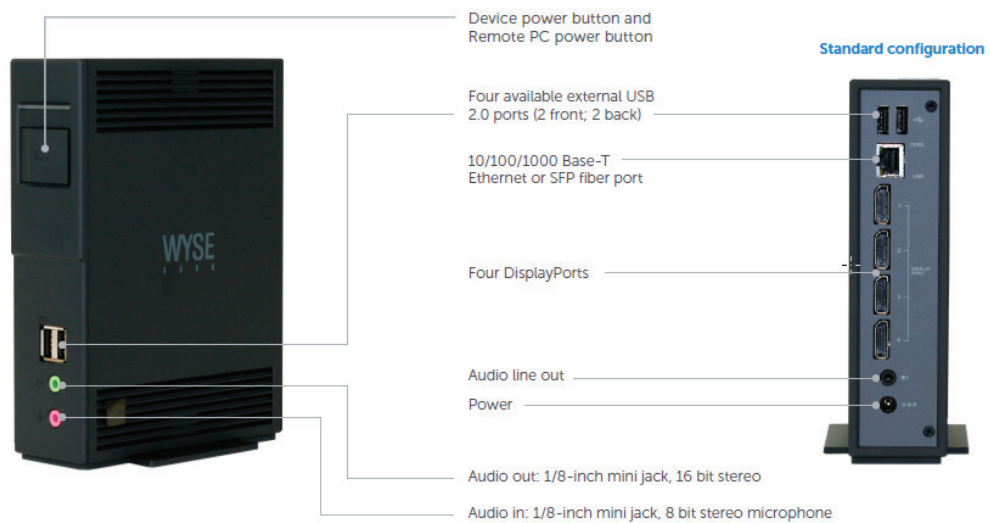


SE2500KIT-3 –Wyse® 5030 (P25) PCoIP Zero Client.



I/O Peripheral Support	Single Link DVI-I port, One DisplayPort (1 DisplayPort to DVI adapter included) Four External USB 2.0 ports (2 front; 2 back)
Button / LEDs	Multi-Function power button LED
Networking	10/100/1000 Base-T Gigabit Ethernet
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate
Audio	Composite Audio 1/8-inch mini jack, One Line out / speaker 1/8-inch mini jack
Physical Characteristics	Height: 1.14 inches (29 mm), Width: 6.97 inches (177 mm) Depth: 4.57 inches (116 mm)
Shipping Weight	8.15 lbs. (3.7 kg)
Mounting	Horizontal feet standard
Device Security	Built-in Kensington security slot (cable sold separately)
Power	Worldwide auto-sensing 100-240 V AC, 50/60 Hz. power supply Average power usage with device connected to 1 keyboard with 1 mouse and 1 monitor: less than 8 watts
Temperature Range	Operating: 32° to 104°F (10° to 40°C), horizontal and vertical positions Storage: 14° to 140°F (-10° to 60°C)
Humidity	20% to 80% condensing, 10% to 95% non-condensing

SE2500KIT-4 –Wyse® 7030 (P45) PCoIP Zero Client.



I/O Peripheral Support	Four DisplayPort ports, Four External USB 2.0 ports (2 front, 2 back)
Button / LEDs	Multi-Function power button LED
Networking	10/100/1000 Base-T Gigabit Ethernet
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate
Audio	Audio In 1/8-inch mini jack, 8-bit microphone Output: 1/8-inch mini jack, full 16-bit stereo, 48KHz sample rate One Line out / speaker 1/8-inch mini jack
Physical Characteristics	Height x Width x Depth: 177 mm x 46 mm x 130 mm (6.97 in x 1.81 in x 5.12 in) Weight 0.765kg (1.67lb)
Mounting	Vertical feet
Device Security	Built-in Kensington security slot (cable sold separately)
Power	Worldwide auto-sensing 100-240 V AC, 50/60 Hz. power supply Average power usage less than 15 watts
Temperature Range	Operating: 32° to 104°F (10° to 40°C), horizontal and vertical positions. Storage: 14° to 140°F (-10° to 60°C)
Humidity	20% to 80% condensing, 10% to 95% non-condensing

Wyse 5030 (P25)/7030 (P45) KVM Installation Note:

Dell recommends using a Gigabit Ethernet switch between PC with the Terra-2 card and the Wyse 5030 (P25)/7030 (P45) KVM. Please read Knowledge Base Article KBA NK-1500-0518 for additional information.

The use of patch panels as part of the wiring between the PC and Wyse 5030 (P25)/7030 (P45) KVM is strongly discouraged due to possible network issues introduced using these devices. Dedicated wiring runs are strongly recommended for Wyse 5030 (P25)/7030 (P45) KVM connections.


If a switched network solution will be used between multiple workstations and remote Wyse 5030 (P25)/7030 (P45) device it must be a network dedicated to serving the Wyse 5030 (P25)/7030 (P45) KVM devices and must not be shared with any other communications. Ethernet network planning and design will be required for a successful implementation. Consult Emerson SureService Advanced Services to obtain a quotation for assistance with this network planning.

SE2500-KIT1 -- Replacement part kit for the FX100 for the R5500 (not for the R7910)

SE2500-KIT-1 Dual Monitor Wyse 5030 (P25) KVM Kit for dual monitor rack mount workstations: Provides the new Tera2 dual interface card, the cables between the Tera2 card and the video card and the Wyse 5030 (P25) KVM as a spare part for or to upgrade an FX100 KVM to a Wyse 5030 (P25) KVM. See the DeltaV KBA # NK-1300-0245 for instructions. This kit is for the SE2512M, SE2525 and VE2555 only. It is not supported on earlier versions of the DeltaV Workstations.

DeltaV Tower Server—Entry Level [based on the Dell T630 server]			
Model #	O/S	DeltaV Compatibility	Warranty
SE2409	Windows Server® 2008 R2 Emb.	DeltaV v11.3 and newer	3 Year
SE2701C03	Windows Server® 2016 Std. Emb.	DeltaV v13.3.1 and newer	5 Year

- Four ethernet ports (two on-board + Intel i350 DP 1GB server adaptor dual NIC ports)
- 8 USB ports: 2 front/6 rear
- Single CPU Quad-Core Intel® Xeon® E5-2609 1.9 GHz
- Integrated VGA controller
- Memory RDIMM, 2133MT Memory: 4GB
- Hard drive: hot pluggable 15K RPM SAS 12Gbps 2.5 hard drives w/ 3.5" Hybrid Carrier: PERC H730 RAID Controller: Drives included: Two 300GB setup in a RAID 1 configuration
- DVD+/-RW drive
- USB optical mouse (2 button w/scroll), local USB country keyboard, local power cord option
- Height 443.5 mm (17.5 inch) with feet / 434.5 mm (17.1 inch) without feet
- Width 304.5 mm (11.98 inch) with feet opened / 217.9 mm (8.57 inch) with feet closed
- Depth 692.8 mm (27.27 inch) without bezel / 708.7 mm (27.9 inch) with bezel
- Weight (maximum configuration) 51.0 kg (112.43 lb) for 3.5 inch hard-drive chassis
- Single, hot-pluggable 750W power supply. Note: UPS required if used as a ProfessionalPlus to protect the system in the event of an unplanned power loss
- Vibration: Operating: 0.26G at 5Hz to 350Hz for 2 minutes, storage: 1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
- Shock: Operating Shock: 1 shock pulse of 41G for up to 2ms, Storage: 6 shock pulses of 71G for up to 2ms
- Note: Servers do not have PS/2 ports or parallel ports. Requires the use of a USB dongle
- The RD1000 is not included in the standard server and must be ordered separately from Dell. Only an external RD1000 can be supplied separately
- SE2409 includes Windows Server 2008 license and a Server 2008 R2 recovery image DVD. Windows Server 2008 R2 64-bit operating system comes pre-installed and includes a Server 2008 32- and 64-bit image restore DVD to field convert the DeltaV Workstation to a 32-bit O/S. Includes 5 additional server CAL licenses (total of 10). Language support included with DeltaV over-pack
- SE2701C03 includes Windows Server® 2016 Standard license and a Server 2016 Std. 64-bit recovery image DVD. Windows Server 2016 Std. 64-bit operating system comes pre-installed. Includes 5 additional server Device CAL licenses (total of 10). Language support included with DeltaV over-pack
- This server supports 1600x1050 monitor resolutions, but does not support 1920x1080 monitor resolutions, multi-monitors or sound cards (no speakers provided with servers)




NOTE: This server does not support the Server 2003 Operating System

Servers for use with Server 2003 must be purchased using the refurbished computer hardware available from DeltaV please consult with Installed Base support for information on the refurbished computer program.

DeltaV Tower Server [based on the Dell T630 server]			
Model #	O/S	DeltaV Compatibility	Warranty
SE2408C1 & C2	Windows Server® 2008 R2 Emb.	DeltaV v11.3 and newer	3 Year
SE2701C01 & 02	Windows Server® 2016 Std. Emb.	DeltaV v13.3.1 and newer	5 Year

- Four Ethernet ports (two on-board + Intel i350 DP 1GB server adaptor dual NIC ports)
- Integrated VGA Controller
- 8 USB ports: 2 front/6 rear
- Memory: 16 GB RDIMM, 2133MT
- Hard drive: hot pluggable 15K RPM SAS 12Gbps 2.5 hard drives w/ 3.5" Hybrid Carrier: PERC H730 RAID Controller
- DVD+/-RW drive
- USB Optical mouse (2 button w/scroll), Local USB country keyboard, Local power cord option
- Height 443.5 mm (17.5 inch) with feet / 434.5 mm (17.1 inch) without feet
- Width 304.5 mm (11.98 inch) with feet opened / 217.9 mm (8.57 inch) with feet closed
- Depth 692.8 mm (27.27 inch) without bezel / 708.7 mm (27.9 inch) with bezel
- Weight (maximum configuration) 51.0 kg (112.43 lb) for 3.5 inch hard-drive chassis
- Dual, hot-pluggable 750W power supply Note: UPS required if used as a ProfessionalPlus to protect the system in the event of an unplanned power loss.
- Vibration: Operating: 0.26G at 5Hz to 350Hz for 2 minutes, Storage: 1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
- Shock: Operating Shock: 1 shock pulse of 41G for up to 2ms, Storage: 6 shock pulses of 71G for up to 2ms
- Note: Servers do not have PS/2 ports or parallel ports. Requires the use of a USB dongle
- The RD1000 is not included in the standard server and must be ordered separately from Dell. Only an external RD1000 can be supplied separately
- SE2408C1 & SE2408C2 includes Windows Server 2008 license and a Server 2008 R2 recovery image DVD. Windows Server 2008 R2 64-bit operating system comes pre-installed and includes a Server 2008 32- and 64-bit image restore DVD to field convert the DeltaV Workstation to a 32-bit O/S. Includes 5 additional server CAL licenses (total of 10). Language support included with DeltaV over-pack
- SE2701C01 & SE2701C02 includes Windows Server® 2016 Standard license and a Server 2016 Std. 64-bit recovery image DVD. Windows Server 2016 Std. 64-bit operating system comes pre-installed. Includes 5 additional server Device CAL licenses (total of 10). Language support included with DeltaV over-pack
- This server supports 1600x1050 monitor resolutions, but does not support 1920x1080 monitor resolutions, multi-monitors or sound cards (no speakers provided with servers).



NOTE: This server does not support the Server 2003 Operating System

Servers for use with Server 2003 must be purchased using the refurbished computer hardware available from the DeltaV system. Please consult with Installed Base support for information on the refurbished computer program.

SE2408C1 and SE2701C01 - Tower Chassis Single Xeon Six-Core CPU Server

- Drives: Two 600GB or greater SAS hard-drives in a RAID 1 Array
- Single CPU - Intel Xeon E5-2620 2.4 GHz 6 cores

SE2408C2 and SE2701C02 - Tower Chassis Dual Xeon Six-Core CPU Server

- Drives: Six 600GB or greater 15K RPM SAS hd-drives in RAID 10 Array
- Two CPUs - Intel Xeon E5-2620 2.4 GHz 6 cores

DeltaV Rack-Mount Server [based on Dell R730 server]			
Model #	O/S	DeltaV Compatibility	Warranty
SE2410Cxx	Windows Server® 2008 R2 Emb.	DeltaV v11.3 and newer	3 Year
SE2702Cxx	Windows Server® 2016 Std. Emb.	DeltaV v13.3.1 and newer	5 Year

- 2U Rack-mountable chassis with sliding ready rails and cable management arm
- 16GB memory
- 4 Ethernet ports all on the motherboard [no add-in NIC cards]
- 4 USB ports – 2 back panel and 2 on front panel
- Integrated graphics controller with wide-screen support (wide-screen has been tested using our supported Dell P2213 monitor at 1680x1050 resolution and 16-bit color depth using a direct connection to the VGA port. Other monitors and KVM solutions may function without issues but have not been tested and may not be supported)
- Hot-pluggable drive backplane
- Redundant, hot-pluggable, 750W power supplies. Note: UPS required if used as a ProfessionalPlus
- DVD+/- R/W drive
- USB mouse (2 button w/ scroll)
- Local USB country keyboard
- Local power cord option
- Rack server dimensions H: 8.73 cm (3.44 in.) x w: 48.20 cm (18.98 in.) x d: 75.58 cm (29.75 in.)
- Rack server weight 31.5 kg (69.45 lb), maximum configuration
- Note: Servers do not have PS/2 ports or parallel ports. Will require the use of a USB DeltaV dongle

Environmental

- Maximum Vibration: Operating 0.26 Grms at 5 Hz to 350 Hz (all operation orientations). Storage 1.88 Grms at 10Hz to 500Hz for 15 minutes
- Maximum Shock: Operating: Six consecutively executed shock pulses in the positive and negative x, y, and z axes of 40 G for up to 2.3 ms. Storage: Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 71 G for up to 2 ms
- SE2410C1, C2 & C3 includes Windows Server 2008 license and a Server 2008 R2 recovery image DVD. Windows Server 2008 R2 64-bit operating system comes pre-installed and includes a Server 2008 32- and 64-bit image restore DVD to field convert the DeltaV Workstation to a 32-bit O/S. Includes 5 additional server CAL licenses (total of 10). Language support included with DeltaV over-pack
- SE2702C01, C02 & C03 includes Windows Server® 2016 Standard license and a Server 2016 Std. 64-bit recovery image DVD. Windows Server 2016 Std. 64-bit operating system comes pre-installed. Includes 5 additional server Device CAL licenses (total of 10). Language support included with DeltaV over-pack
- This server supports 1600x1050 monitor resolutions, but does not support 1920x1080 monitor resolutions, multi-monitors or sound cards (no speakers provided with servers)

NOTE: This server does not support the Server 2003 Operating System

Servers for use with Server 2003 must be purchased using the refurbished computer hardware available from DeltaV please consult with Installed base support for information on the refurbished computer program.



SE2410C1& SE2702C1 - DeltaV Server based on the Dell PowerEdge R730 Rack Mounted Server – RAID 1

- One Xeon E5-2620 v3 2.4GHz, 15M Cache, 8.00GT/s QPI, Turbo, HT, 6C/12T (85W)
- Perc H730 RAID controller
- Two 600GB or greater hot pluggable 15K RPM SAS 12Gbps 2.5” hard drives in a RAID1 Array

SE2410C2 & SE2702C02 - DeltaV Server based on the Dell PowerEdge R730 Rack Mounted Server – RAID 10

- Two Xeon E5-2620 v3 2.4GHz, 15M Cache, 8.00GT/s QPI, Turbo, HT, 6C/12T (85W)
- Perc H730 RAID controller
- Six 600GB or greater hot pluggable 15K RPM SAS 12Gbps 2.5” hard drives in a RAID10 Array

SE2410C3 & SE2702C03 - DeltaV High Performance Server based on the Dell PowerEdge R730 Rack Mounted Server - RAID 10

- Two Xeon E5-2643 v3 3.4GHz, 20M Cache, 9.6GT/s QPI, Turbo, HT, 6C/12T (135W)
- 32 GB memory (8 x 4GB RDIMM, 2133MT/s)
- Perc H730 RAID controller
- Six 400GB SAS Mix Use MLC 12Gbps 2.5in hot pluggable Solid State Drives,13G in a RAID10 Array
- SE2410C3 – Supports Windows Server 2008 R2 Std 64-Bit for DeltaV v12.3 and greater 64-Bit systems only

Information on the “Windows for Embedded Systems” Operating Systems

“Windows for Embedded Systems” is a version of the Windows Operating systems specifically created and licensed for vendors who are purchasing the operating system for resale as part of a solution such as DeltaV DCS.

The DeltaV SE numbered computers using the “Windows for Embedded Systems” license must only be used as a DeltaV workstation or server for DeltaV application related tasks. These computers may not be purchased for use as a general purpose computer or used for applications where DeltaV or DeltaV related tasks are not primary use for the computer.

Use of KVM (Keyboard, Video, and Mouse) extenders and switches on DeltaV Workstations

Only the specific KVM products listed in the DeltaV Alliance program are supported with DeltaV. Please note the video card information on the workstation computers. The video output connectors have changed and special adaptors must be used [that may not be supplied] or new KVM equipment may have to be obtained to use these computers in existing systems where KVMs are installed. These computers no longer have VGA connectors and the use of VGA adaptors may not be supported by existing KVM devices.

Computer Ordering Information

Ordering numbers are listed in the sections above. These specifications are subject to change without notice. We guarantee that the computers sold for use with the DeltaV system will provide performance and storage space needed to support DeltaV solutions. We do not guarantee that the hardware specifications of the computers will remain unchanged during the sales life of a specific DeltaV SE ordering number.

The DeltaV Workstation and Server specifications provided in this data sheet describe the products sold by Emerson for use with DeltaV Control Systems. These specifications are not provided to allow users to purchase similar computers directly from Dell or other PC vendors. The DeltaV system is supported only on the specific Dell computer configurations specified in this document and sold from our pricebook. The DeltaV system is not supported on other Dell computers or other computer configurations or on non-Dell computers unless specifically noted otherwise. Any use of non-supported computers will affect our ability to provide technical support and will involve additional costs for technical support.

This PDS only provides specifications for DeltaV specific options that can vary from the standard Dell computer. So specifications for features that are built-in and not optional are not listed. If detailed information on the standard features of the computer is required, please refer to the Dell specifications.

NOTE: Hardware specifications of these computers especially as related to: size, backplane connection types (such as COM ports or P/S2 ports), number of slots, etc. are not guaranteed to be available on newer DeltaV workstations as these specifications can change from the vendor. It may not be possible to provide the same capabilities from one version of a DeltaV Workstation to a succeeding version.

To order the computers in this document with specifications different than those listed requires a customer special configuration to be quoted by Emerson. Changing computer specification requires testing the new configuration for compatibility with DeltaV software.

Note about modifying DeltaV Workstation and Server Hardware Configurations

DeltaV workstations and servers are delivered with sufficient memory, hard drives, and network interface cards and other hardware to support all DeltaV applications. No additional hardware changes are required to support DeltaV applications and standard installations. As such we do not support the field installation of additional memory, additional hard drives, added NIC cards, different video cards or other field implemented hardware modifications without consultation with Emerson. Failure to consult with Emerson on any hardware modifications may result in poor DeltaV performance and make it difficult to provide technical support for those workstations that have been modified. Hardware modifications can also require changes to the Windows O/S configuration that may impact the performance of the workstation or the network.

Emerson

North America, Latin America:

+1 800 833 8314 or

+1 512 832 3774

Asia Pacific:

+65 6777 8211

Europe, Middle East:

+41 41 768 6111

www.emerson.com/deltav

©2017, Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. The DeltaV logo is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.