DeltaV™ Workstation and Server Hardware

Computers for DeltaV™ are available to support multiple versions of DeltaV Systems.

- Pre-installed Operating System (O/S) software for ease of deployment

- Available with Windows 10 IoT Enterprise LTSC 2021 or Server IoT 2022

- Easy control network installation; all network cards pre-installed and ready to plug and play

- Choice of workstation and server hardware to optimize your cost and performance

- Choices for tower or rack-mount computers, as well as RAID drive options

- Support for single, dual, and quad monitors

Introduction

DeltaV™ software runs on a specific configuration of supported computers. The selection of DeltaV workstation and server hardware provides the platform you need to engineer your control strategy and operate your process.

DeltaV computer hardware, on a specific set of preselected computer hardware, have been chosen to provide the best cost and performance solution for your DeltaV system.

Emerson preselects both the hardware configuration and the O/S configuration for your DeltaV System. This will enable you to more efficiently setup, engineer, and troubleshoot a DeltaV system. In turn, you can focus on your process control functions.

DELTAV™

EMERSON™

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.

Easy Control Network Installation. Computers ship from the factory with the appropriate DeltaV control network cards pre-installed — 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 have just set up a new DeltaV network node.

Choose Between Workstations and Servers to Provide the Best Solution. Match our options with your requirements for chassis configuration and RAID storage. Some systems are served well with workstations or industrial computers. Other, larger systems, require servers for a higher level of performance.

Operating System is Pre-loaded. Computers are shipped with operating systems pre-installed and with appropriate settings configured for use with DeltaV systems. Workstations are shipped with Windows 10 IoT Enterprise LTSC 2021. Servers are shipped with Windows Server IoT 2022.

Product Description

The computer 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.

Emerson might update hardware so that the benefits of increasing performance inherent with using state-of-the-art equipment can be realized.

Workstation and Server Hardware

Secure Data and Fast Recovery from Hard Drive Failures. Workstations with RAID1 drives provide higher availability and fast recovery from failures. Servers in RAID 1 and RAID 10 configurations increase data protection and help enhance the performance of the server.

Crystal Clear Video. Emerson offers a variety of monitors to work with DeltaV Operate, the legacy HMI. These, or any Windows-compatible monitors, can be used with DeltaV Live.

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. Computers are shipped with a five-year warranty. Optional two-year additional warranty available for servers.

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

Monitor Options. Choose standard or widescreen flat panel monitors to display your process graphics. Choose dual or quad monitors for maximum viewing area. Any size monitor can be used with DeltaV Live.

Monitor Specifications

DeltaV Live is the modern operator interface available with DeltaV v14.LTS and later. This is the preferred HMI to use with DeltaV systems. DeltaV Live utilizes scalable vector graphics and HTML5 technologies, making it aspect and resolution independent. Any monitor that can be detected by the Windows operating system may be used with DeltaV Live. Complementary applications (for example, Process History View, Alarm Help, Control Studio Online) can be launched from DeltaV Live and behave as normal Windows programs. For detailed setup instructions, please consult Knowledge Base Article AK-1700-0069. **DeltaV Operate** is the legacy operator interface and supports 16:10 and 16:9 aspect ratios to a resolution of 1920x1080 in single, dual, or quad screen layouts. Dedicated cables are required for each screen.

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.

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.*

Model Number	DeltaV Compatibility	Description	Warranty
SE2807	>=13.3.2	19-Inch LED Monitor - Dell Monitor P1917S; 5:4 Aspect Ratio; 1280x1024 at 60Hz Resolution; VGA/HDMI/DP Cables included: 1 VGA, 1 DP, and 1 USB	3 year
SE2818	>=13.3.2	43-inch LED Ultra HD 4K Quad Monitor - Dell Monitor U4323QE; Connect up to four independent clients to a single monitor; 16:9 Aspect Ratio; 3840 x 2160 at 60 Hz (HDMI & DP only) Resolution; 2xHDMI / 2xDP	3 year
NEW SE2821	>13.3.2	24-inch LED Widescreen Monitor - Dell Monitor P2425; 16:10 Aspect Ratio; 1920x1200 at 100Hz Resolution; VGA/USB/HDMI/DP Cables included: 1 HDMI, 1 DP and 1 USB	3 year
NEW SE2822	>=13.3.2	22-inch LED Widescreen Monitor – Dell Monitor P2225H; 16:9 Aspect Ratio; 1920x1080 at 100Hz Resolution;VGA/USB/HDMI/DP Cables included: 1 HDMI, 1 DP and 1 USB	3 year
NEW SE2823	>=13.3.2	24-inch LED Widescreen Monitor - Dell Monitor P2425H; 16:9 Aspect Ratio; 1920x1080 at 100Hz Resolution; VGA/USB/HDMI/DP Cables included: 1 HDMI, 1 DP and 1 USB	3 year

Monitor physical appearances change periodically and without notice from monitor suppliers. We cannot guarantee that physically compatible monitors will be always available. If you require spare or replacement monitors to be physically compatible with installed monitors, then additional monitors must be ordered at the same time as the primary monitors.

Touch screen is supported on DeltaV workstations, but none of the above models have touch screens. Monitors selected for touchscreen should match the aspect ratio and optimal resolution of the supported monitors.

Specifications Common to all Computers

Computer hardware does not follow the same lifecycle guidelines as Emerson-manufactured DeltaV hardware. DeltaV Workstations and Servers are supported via the original manufacturer warranty, with time specified per model. Remaining warranty time can be found by service tag number in Guardian or on the Dell support website. Consult your local Emerson support office if you need more information.

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. For the workstations, the 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 ensure the computer environment is compatible with G1. If there is any chance of sulfur in the environment, computers must be protected in environmental enclosures or relocated to a sulfur-free environment.

DeltaV workstations, servers and associated components are classified as Information Technology Equipment. This equipment is typically installed in control rooms with Class 1 environments unless the specifications in this document state an exception. The equipment complies with standard EN55022 Class A or Class B for emissions and standard EN50082-1.1992 for immunity. Please refer to DeltaV Site Prep Manual for more information.
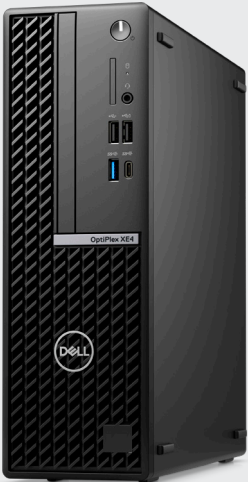
Computer restore image: Computers on this data sheet do not have operating system restore image shipped with the computer. Restore images are posted in Guardian, if there is no license verification required. Contact your local Emerson office if the restore image you need is not on the Guardian portal.

The servers shown in this data sheet are intended for embedded applications. 'Embedded application' means a software application that permanently resides in an industrial device, typically stored in a non-volatile memory such as read-only memory or flash memory, or server intended for use as appliances. 'Server appliance' means a server that is not intended to execute user-supplied software, delivers services through one of more networks, is typically managed through a web or command line interface and is bundled with a pre-installed and application software that is used to perform a dedicated function or set of tightly coupled functions.

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

For workstations and servers that will be used as a DeltaV ProfessionalPLUS Station, 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 nodes 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 Workstation [based on Dell OptiPlex XE4 Industrial Grade Tower]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
SE2608C0x	Windows 10 IoT Enterprise LTSC 2021	v14.x MultiOS[1], v15.LTS and newer	5 Year

- Small form factor chassis
- SE2608C01
  - Memory: 16GB
  - One 512GB Solid State Drive, no RAID
- SE2608C02
  - Memory: 16GB
  - Two 512GB Solid State Drives, Software RAID 1
- *NEW* SE2608C05
  - Memory: 32GB
  - Two 512GB Solid State Drives, Software RAID 1
- 5 Network Interface Ports
- 3.1 USB ports: 5 ports – 1 front and 4 rear / 2.0 USB ports: 4 ports – 2 front and 2 rear
- Intel® i7 12700, 12 Core Processor, 2.1 to 4.9 GHz
- No DVD drive included
- On-board integrated audio
- On-board integrated graphics – Single/Dual/Quad Monitors
- 4 display ports
- USB optical mouse (2 button w/ scroll)
- External speaker
- USB local country keyboard
- Local power cord option

- Dimensions (H x W x D) Inches / (mm): 11.4"x 3.65"x 11.53" (290 x 92.6 x 292.8)
- Power Supply Unit (PSU): 300W up to 92% efficient PSU (80Plus Platinum)
- Temperature: Operating 5°C to 45°C (41°F to 113°F), Storage -40°C to 65°C (-40°F to 149°F)
- Relative Humidity: Operating 20% to 80% (non-condensing), Storage 5% to 95% (non-condensing)
- Please see Dell OptiPlex XE4 documentation for detailed environmental specifications.
- Recovery images are downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Win10 LTSC 2021; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

DeltaV Rack Mount Workstation [based on Dell Precision R7960XL workstation]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
SE2642C0x	Windows 10 IoT Enterprise LTSC 2021	v14.x MultiOS[1], v15.LTS and newer	5 Year

- Chassis: 2U rack mount
- Two 512GB Solid State Drives
- RAID 1
- SE2642C01
  - Memory: 16GB
- *NEW* SE2642C02
  - Memory: 32GB
- CPU: Intel® Xeon Silver 4410Y 2.0-3.9GHz turbo, 12-Core processor
- NVIDIA T1000 graphics card
- 4 mini-Display Port
- mDP to DP female adapters included
- Supports 4K monitors
- 6 Network Interface Ports
- USB ports: USB 2.0 – 1 front / 1 rear, USB 3.0 – 1 rear
- Dual hot-plug redundant power supply 1100W
- USB optical mouse (2 button w/scroll), wired keyboard
- External speaker not included
- Dimensions
  - Height: 3.39 in (8.68cm)
  - Width: front – 18.96in (48.2 cm); rear – 17.08in (43.4cm)
  - Depth: 30.44 in (77.21cm)
  - Weight: max – 65.36lb (29.64 kg); min – 46.25lb (20.98kg)
- Environmental (for additional information about environmental specifications, refer to the Product Environmental Datasheet located with the Documentation on **www.dell.com/support/home**)
  - Temperature: Operating 5°C to 35°C (41°F to 95°F); Storage -40°C to 65°C (-40°F to 149°F)
  - Relative Humidity: Operating 10% to 90% (non-condensing); Storage 0% to 95% (non-condensing)
  - Vibration (maximum): Operating .66 GRMS; Storage 1.30 GRMS
  - Shock (maximum): Operating 110 G; Storage 160 G
- No DVD drive included
- Optional Tera2 card available via model SEWKSTKIT-TERA2, see page 8

Note: *The TERA2 card supports, but does not include SE2500KIT-5, the Amulet Hotkey (DXZ4) PCoIP Zero Client KVM Extender for quad monitors (see specs below).*

- Ships with Windows 10 LTSC 2021 installed. Recovery image is available for download on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Win10 LTSC 2021; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

DeltaV Dual/Quad Monitor Workstation [based on Dell Precision T5860XL workstation]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
SE2640C01	Windows 10 IoT Enterprise LTSC 2021	v14.x MultiOS[1] v15.LTS and newer	5 Year

- Two 512GB Solid State Drives; Raid 1
- CPU: Intel® XEON® W3-2425 3.0-4.4GHz turbo, 6-Core processor
- Memory: 16GB
- 3 Network Interface Ports
- USB ports: (10 total) 2 USB 3.2 Gen 1, 1 USB Gen 2 Type-C with PowerShare, 1 USB 3.2 Gen 2 Type-C – front / 3 USB 3.2 Gen 2 Type-C, 2 USB 3.2 Gen 1, 1 USB 3.2 Gen 1 with SmartPower – rear
- 750W Internal power supply
- Onboard integrated audio
  - Internal speaker
  - External speaker not included
- NVIDIA T1000 graphics card
  - 4 mini-DisplayPort
  - mini-Display Port to Display Port cable
- Optional Tera2 available, see model number below
- Dell optical (2 button and scroll) Mouse, USB Keyboard, and Local Power Cord
- No DVD Drive
- Chassis: Mid-sized tower
- Dimensions
  - Height 414.0 mm (16.29 in) / 417.9 mm (16.45 in) with feet
  - Width 172.60 mm (6.79 in) / 176.50 mm (6.94 in) with feet
  - Depth 429.60 mm (16.90 in) / 452.10 mm (17.79 in) with lock-structure
  - Weight 21.70kg (47.80lb)
- Environmental (for additional information about environmental specifications, refer to the *Product Environmental Datasheet* located with the *Documentation* on **www.dell.com/support/home**)
  - Vibration (maximum): 0.52 GRMS random at 5 Hz to 350 Hz during operation / 2.00 GRMS random at 5 Hz to 350 Hz in storage
  - Shock (maximum): Bottom half-sine pulse with a change in velocity of 40G, 2.5ms during operation / 105G half-sine pulse with a change in velocity of 105G, 2.5msin storage
  - Temperature: 10-35°C (50-95°F) operation / -40 to 65°C (-40 to 149°F) in storage
  - Relative humidity: 20-80% (non-condensing, max dew point temperature = 26°C) operation / 5-95% (non-condensing, max dew point temperature = 33°C)
- The SE2640C01 ships with Windows 10 IoT Enterprise LTSC 2021 installed. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Win10 LTSC 2021; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

Rail Kit for T5860XL	
Model Number	**Description**
NEW SE2640KIT-1	Kit to Convert T5860 to a Rack-Mount workstation

- Includes sliding rails and hardware to convert from tower to rack-mount
- Dimensions of workstation with rails installed (rack-mount configuration)
  - Width 19 inches
  - Height 6.8 inches
  - Depth 18.5 inches
- See Dell website for instructions on how to install the rail kit
- Note that the rails and brackets might ship separately from Dell

Image 1. *Front view of T5860 as rack-mount with rails installed.*

Image 2. *Side view of T5860 as rack-mount with rails installed.*

Tera2 Card	
Model Number	**Description**
SEWKSTKIT-TERA2	Tera2 Card

- Enable PCoIP protocol with zero clients
- Option with SE2640C01 and SE2642C0x

DeltaV Operator Panel PC [based on Phoenix Contact VL3 Industrial Panel PC]			
Model Number	**Description**	**DeltaV Compatibility**	**Warranty**
NEW SE2620C0x	Industrial Panel PC with Win10 LTSC 2021; see below for display size options	v14.x MultiOS[1], v15.LTS and newer	2 Year[2]
NEW SE2620W3YREXT[2]	3-Year Warranty Extension from 2 to 5 years total	For use with SE2620C0x	3 Years

- All models have the same specifications, except for the display size. See options below.

- Intel® Core™ i7-1185G7E, 2.8 GHz

- Memory: 16GB RAM

- Drive: 480GB SSD

- 3 Ethernet interface ports; 10/100/1000 Mbps

- 6x USB 3.1

- Audio out (via USB speaker, not provided)

- Single Touchscreen LED Display

- No keyboard/mouse included

- No DVD Drive

- Dimensions:
  SE2620C01 – 15.6-in. display – 15.67"/398mm x 10.75"/273mm x 3.46"/88mm and 15.65 lbs/7.1 kg
  SE2620C02 –18.5-in. display – 18.31"/465mm x 12.20"/310mm x 3.50"/89mm and 18.08 lbs/8.2 kg
  SE2620C03 – 21.5-in. display – 20.94"/532mm x 13.62"/346mm x 3.50"/89mm and 19.84 lbs/9.0 kg

- Power Supply: 24 VDC power; Removable COMBICON screw-type connector

- Ambient Operating Temperature: -20°C … 50°C

- Vibration: Vibration resistance according to EN 60068-2-6, 1g

- Shock: Shock test according to IEC 60068-2-27, 15g with 11 ms impulse

- Class I, Division 2 rating

  - See Phoenix Contact VL3 documentation for environmental specifications.

  - If IECex / ATEX certification is needed, local Emerson offices can order VL2 models directly from Phoenix Contact. These are available with Win10 LTSB 2016 and Win10 LTSC 2021.

- Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Win10 LTSC 2021; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

[2]Extended warranty must be purchased when Panel PC is ordered.

DeltaV Industrial Box PC (BPC) Workstation [based on Phoenix Contact VL3 BPC]			
Model Number	**Description**	**DeltaV Compatibility**	**Warranty**
NEW SE2635C01	Industrial computer with Windows 10 IoT Enterprise LTSC 2021	v14.x MultiOS[1], v15.LTS and newer	2 Year
NEW SE2635W3YREXT[2]	BPC 3-Year Warranty Extension from 2 to 5 years total.	For Use with SE2653C01	3 Years

- For wall mount installation
- CPU: i7- 1185G7E 2.8GHz
- Memory: 16GB
- Drive: 480GB Solid State Drive, No RAID
- 2 Display Ports
- 3 Network Interface Ports
- 6 USB 3.1 ports
- Empty PCIe x4 slot
- Audio out via Display Port
- Serial Communications: 3 RS-232/422/485 ports
- No DVD Drive
- External speakers: not included
- Keyboard and mouse: not included
- Power Supply: 24 VDC power
- Height: 225 mm (8.86 in), Width: 109 mm (9.29 in), Depth: 230mm (9.05 in)
- Weight: 4.3 kg (9.5 lbs) plus packaging
- Temperature: Operating -20°C to 50°C (-4°F to 122°F) Storage -40°C to 70°C (-40°F to 158°F)
- Permissible Humidity: Operating 10% to 95% (non-condensing), Storage/Transportation 10% to 95% @ 40°C (non-condensing)
- Vibration (operation): according EN 60068-2-6, 1 g
- Shock: according EN 60068-2-27, 15g / 11 ms impulse
- Protection Rating: IP30
- Please see Phoenix Contact VL3 BPC documentation for detailed environmental specifications
- The SE2635C01 ships with Windows 10 IoT Enterprise LTSC 2021 installed. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV 14.LTS and v14.FP-Japanese MultiOS versions can run on Win LTSC 2021; these are only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

Other Industrial PCs for DeltaV Systems via Alliance program	
Pepperl+Fuchs Industrial Box PC – BPC3200 and associated modular HMIs	
Industrial, Non-Ex General Purpose	**ATEX & IECEx Zone 2 and Class I, Div 2**
BPC3200-NB-NNNN-D-2NMP3NN-NN0 (256GB SSD)	BPC3200-MB-NNNN-D-2NMP3NN-NN0 (256GB SSD)
BPC3200-NB-NNNN-D-2NMQ3NN-NN0 (512GB SSD)	BPC3200-MB-NNNN-D-2NMQ3NN-NN0 (512GB SSD)
Industrial Grade Panel PCs and HMI Solutions also available in 15.6", 19", 21.5" using the BPC3200	

- Intel® Core™ i5-7300U
- Memory: 16GB RAM
- Drive: 256GB or 512GB SSD
- 5x USB ports (2x USB Ex i ports prepared for Pepperl+Fuchs intrinsically safe keyboard, 2x USB 3.1 Gen1 (5 Gbps) ports, 1x USB 2.0 port)
- 1x 3.5mm audio jack (Line-out)
- Recommended Power Supply: PS1000-A6-24.5
- 1x DisplayPort 1.2 port (supports DP++)
- 1x mini-DisplayPort 1.2 port (supports DP++)
- 1x Power input w/ 3 pin terminal block
- 1x RS232/422/485 port (D-SUB 9)
- 1x Connector for external power button
- Ambient Operating Temperature: -20 ... 55 °C (-4 ... 131 °F) [with wide temperature grade RAM/storage]
- Order with Win10 LTSC 2021 to be compatible with DeltaV v14.LTS MultiOS and v15.LTS and later.

DeltaV Rugged Laptop – PK Controller Engineering Laptop [based on Dell Latitude 14" Rugged 5430]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
SE2625C01	Windows 10 IoT LTSC 2021	v14.x MultiOS[1], v15.LTS and newer	5 Year

- 14" Rugged Laptop
- 1 Network Interface Ports
- 3.1 USB ports: 3 ports – 2 left side and 1 right side
- Intel Dual-Band Wi-Fi Adapter
- Intel Core i7-1185G7 Processor, 3 GHz
- Memory: 16.0GB
- Drives: 512GB Solid State Drive (SSD)
- No DVD drive included
- On-board integrated audio
- 1920x1080, Outdoor Readable, Touch screen
- Integrated touchpad
- Sealed Internal RGB Backlit English Keyboard
- 2 3-cell (53.5 Whr) Lithium Ion Battery
- 90W AC Adapter
- Dimensions (H x W x D) Inches (mm) : 0.76 x 12.65 x 8.35 (19.3 x 321.4 x 212)
- Weight: 3.01 lbs / 1.36 kg (without handle and bumpers)
- MIL-STD-810G testing1: Transit drop (36"), blowing dust, vibration, functional shock, humidity, altitude, thermal extremes
- Temperature: Operating -29°C to 60°C (-20°F to 140°F) Storage -51°C to 7°C (-60°F to 160°F)
- Relative Humidity: Operating 10% to 80% (non-condensing) Maximum dew point temperature = 26°C Storage 10% to 95% (non-condensing) Maximum dew point temperature = 33°C
- IEC 60529 ingress protection1: IP52 (dust-protected, protected against dripping water when tilted up to 15°)
- (1) Based on testing and certification to MIL-STD-810G, IEC 60529 standards, performed and reported independently by accredited testing companies.
- This laptop is only tested for use with the Standalone PK Engineering software, which is its intended use.
- The SE2625C01 ships with Windows 10 IoT LTSC 2021 installed. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Win10 LTSC 2021; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

SE2500KIT-6 – Amulet Hotkey (DXZC) PCoIP Zero Client

I/O Peripheral Support	Dual DisplayPort ports, Four External USB 2.0 ports (2 front, 2 back)
Button / LEDs	Multi-Function power button LED
Networking	Single RJ45 10/100/1000 Base-T Gigabit Ethernet
Display	Dual monitors up to 1920 x 1200 maximum @ 60Hz
Audio	Stereo headphone 3.5mm jack Stereo microphone input 3.5mm jack Stereo line out 3.5mm jack
Physical Characteristics	Height x Width x Depth: 34 mm x 176 mm x 133 mm (1.3 in x 6.9 in x 5.2 in) Weight 0.6kg / 1.4 lbs.
Device Security	Built-in Kensington security slot (cable sold separately)
Power	Less than 12W nominal (excluding USB devices)
Temperature Range	Operating: 59° to 104°F (15° to 40°C) Storage: 14° to 140°F (-10° to 60°C)
Warranty	3 year

SE2500KIT-5 – Amulet Hotkey (DXZ4) 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	Dual redundant RJ45 10/100/1000 Base-T Gigabit Ethernet
Display	Four monitors up to 1920 x 1200 maximum @ 60Hz
Audio	Stereo headphone 3.5mm jack Stereo microphone input 3.5mm jack Stereo line out 3.5mm jack
Physical Characteristics	Height x Width x Depth: 34 mm x 230 mm x 130 mm (1.3 in x 9.1 in x 5.1 in) Weight 0.9kg / 2 lbs.
Device Security	Built-in Kensington security slot (cable sold separately)
Power	Less than 12W nominal (excluding USB devices)
Temperature Range	Operating: 59° to 104°F (15° to 40°C) Storage: 14° to 140°F (-10° to 60°C)
Warranty	3 year

Amulet Hotkey (DXZ4) KVM Installation Note:

Dell recommends using a Gigabit Ethernet switch between PC with the Terra-2 card and the Amulet Hotkey (DXZC & DXZ4) 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 Amulet Hotkey (DXZC & DXZ4) KVM is strongly discouraged due to possible network issues introduced using these devices. Dedicated wiring runs are strongly recommended for Amulet Hotkey (DXZC & DXZ4) KVM connections.

If a switched network solution will be used between multiple workstations and remote Amulet Hotkey (DXZC & DXZ4) device it must be a network dedicated to serving the Amulet Hotkey (DXZC & DXZ4) 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.

DeltaV Tower Server [based on Dell PowerEdge T360 server]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
NEW SE2732C0x	Windows Server® 2022	v14.x MultiOS[1], v15.LTS and newer	5 Year

SE2732C01	**SE2732C02**	**SE2732C03**	**SE2732C04**
▪ Two 800GB Solid State Drives ▪ RAID 1	▪ Six 800GB Solid State Drives ▪ RAID 10	▪ Two 600GB SAS Hard Disk Drives ▪ RAID 1	▪ Six 600GB SAS Hard Disk Drives ▪ RAID 10

- PERC RAID Controller
- CPU: Intel XEON E-2488 3.2 GHz 8c/16T with turbo
- Memory: 16GB
- Ethernet Ports: 6, 1GB ports + 1 iDRAC port
- Ports (non-Ethernet): front – 1 USB 3.2, 1 mini iDRAC Direct / rear – 3 USB 2.0, 3 USB 3.2, 1 Serial, 1 VGA
- One open PCIe full height (1x16)
- Power Supply: Dual, hot-pluggable, redundant, 600W
- ***Note:*** *UPS required if server is used as a ProfessionalPlus to protect the system in the event of an unplanned power loss.*
- Mouse: Dell optical (2 button and scroll)
- USB Keyboard
- Local power cord
- Supports 1920 x 1080 monitor resolution
- No DVD Drive
- Dimensions
  - Height 382.5 mm (15.06 in)
  - Width 175 mm (6.88 in)
  - Depth 579.72 mm (22.82 in) with bezel
  - Weight maximum 25.10 kg (55.34 pounds)
- Environmental (for additional information about environmental specifications, refer to the *Product Environmental Datasheet* located with the Documentation on **www.dell.com/support/home**)
- Vibration: 0.26 Grms at 5 Hz to 350 Hz / 1.88 Grms at 10 Hz to 500 Hz for 15 minutes in storage
- Shock: 6 shock pulses of 6 G for up to 11ms during operation / 6 shock pulses of 71 G for up to 2ms in storage
- Temperature: 10-35°C (50-95°F) ASHRAE A2 continuous operation / -40 to 65°C (-104 to 149°F) in storage
- Relative Humidity: 8% with minimum dew point -12°C to 80% with 21°C (69.8°F) maximum dew point, ASHRAE A2 continuous operation / 5-95% with 27°C (80.6°F) maximum dew point in storage
- This server does not come with the Dell OpenManage Server Administrator DVD. The software agent can be downloaded from the Dell website if needed.
- SE2732C0x ships with Server IoT 2022 installed with 10 CALs. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Server IoT 2022; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v1 4.x.

DeltaV Rack Server [based on Dell PowerEdge R660XSXL server]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
SE2719C0x	Windows Server® IoT 2022	v14.x MultiOS[1], v15.LTS and newer	5 Year

- 2.5" rack-mountable chassis with sliding ready rails and cable management arm
- One Xeon Gold 5415+ 2.9G, 8C/16T, 16GT/s, 22.5M Cache, Turbo, HT (150W) DDR5-4400 processor
- PERC RAID Controller

SE2719C01	**SE2719C02**	**SE2719C03**
■ Memory: 16GB	■ Memory: 16GB	■ Memory: 32GB
■ RAID 1	■ RAID 10	■ RAID 10
■ Two 800GB Drives	■ Six 800GB Drives	■ Six 800GB Drives

- 2.5" hot pluggable, Solid State Drives
- 6 Ethernet ports + 1 iDRAC port
- 4 USB ports – back panel: 1 USB 3.0, 1 USB 2.0 and front panel: 1 Micro-AB USB for iDRAC connection, 1 USB 2.0
- Integrated VGA Controller
- Two open PCIe Gen4 slots (1x8 and 1x16)
- Hot-pluggable drive backplane
- Redundant, hot-pluggable, 800W power supplies
- USB mouse (2 button w/ scroll)
- Local USB country keyboard
- 2 Local power cables
- No DVD Drive
- Dimensions
  - Height 42.8 mm (1.68 inches)
  - Width 482 mm (18.97 inches)
  - Depth 712.95 mm (28.05 inches) without bezel / 748.79 mm (29.85 inches) with bezel
  - Weight 19.45 Kg (55.33 pound)
- Environmental (for additional information about environmental specifications, refer to the *Product Environmental Datasheet* located with the Documentation on **www.dell.com/support/home**)
  - Vibration: 0.21 Grms at 5 Hz to 500 Hz for 10 min during operation / 1.88 Grms at 10 Hz to 500 Hz for 15 minutes in storage
  - Shock: 6 shock pulses of 6 G for up to 11ms during operation / 6 shock pulses of 71 G for up to 2ms in storage
  - Temperature: 10-35°C (50-95°F) ASHRAE A2 continuous operation, not in direct sunlight / -40 to 65°C (-104 to 149°F) in storage
  - Relative humidity: 8% with minimum dew point -12°C (10.4°F) to 80% with 21°C (69.8°F) maximum dew point, ASHRAE A2 continuous operation / 5-95% with 27°C (80.6°F) maximum dew point in storage
- This server does not come with the Dell OpenManage Server Administrator DVD. The software agent can be downloaded from the Dell website if needed.
- The SE2719C0x ships with Windows Server IoT 2022 Standard 16 Core with 5 Device CALs installed. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Server IoT 2022; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

DeltaV Rack Server [based on Dell PowerEdge R360 server]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
NEW SE2731C0x	Windows Server® 2022	v14.x MultiOS[1], v15.LTS and newer	5 Year

- 1U rack-mountable chassis with sliding ready rails and cable management arm
- Intel Xeon E-2488 3.2G, 8C/16T, 24M Cache, Turbo, HT (95W) DDR5
- PERC RAID Controller
- Memory: 16GB
- Ethernet ports: 6 + 1 dedicated iDRAC
- 4 USB ports – rear: 1 USB 3.2 Gen 1, 1 USB 2.0 and front: 1 Micro-AB USB for iDRAC connection, 1 USB 2.0
- One open PCIe (1 x 16)
- Redundant, hot-pluggable, 600W power supplies
- USB mouse (2 button w/ scroll)
- Local USB country keyboard
- 2 Local power cables
- No DVD Drive
- SE2731C01 – RAID 1; Two 600GB hot pluggable, 2.5" 10k SAS Hard Disk Drives 12Gbps
- SE2731C02 – RAID 10; Six 600GB hot pluggable, 2.5" 10k SAS Hard Disk Drives 12Gbps
- Dimensions
  - Height 42.8 mm (1.68 inches)
  - Width 482 mm (18.97 inches)
  - Depth 534.5 mm (21.04 inches) without bezel / 548.1 mm (21.58 inches) with bezel
- Environmental (for additional information about environmental specifications, refer to the *Product Environmental Datasheet* located with the Documentation on **www.dell.com/support/home**)
  - Vibration: 0.21 Grms at 5 Hz to 500 Hz (all operation orientations) / 1.88 Grms at 10 Hz to 500 Hz for 15 minutes in storage
  - Shock: 6 shock pulses of 6 G for up to 11ms during operation / 6 shock pulses of 71 G for up to 2ms in storage
  - Temperature: 10-35°C (50-95°F) ASHRAE A2 continuous operation, not in direct sunlight / -40 to 65°C (-104 to 149°F) in storage
  - Relative humidity: 8% with minimum dew point -12°C (10.4°F) to 80% with 21°C (69.8°F) maximum dew point, ASHRAE A2 continuous operation / 5-95% with 27°C (80.6°F) maximum dew point in storage
- This server does not come with the Dell OpenManage Server Administrator DVD. The software agent can be downloaded from the Dell website if needed.
- The SE2731C0x ships with Windows Server IoT 2022 Standard 16 Core with 5 Device CALs installed. Recovery image is downloadable on **https://guardian.emerson.com**.

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Server IoT 2022; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

Independent DeltaV Domain Controller Rack Server [based on Dell PowerEdge R360 server]			
Model Number	**O/S**	**DeltaV Compatibility**	**Warranty**
NEW SE2724C01	Windows Server® 2022	v14.x MultiOS[1], v15.LTS and newer	5 year

- 1U rack-mountable chassis
- Intel Xeon E-2434 3.4G, 4C/8T, 8M Cache, Turbo, HT (55W) DDR5-4800 processor
- Two 600GB hot pluggable set up in a RAID 1 configuration
- Memory: 16GB
- 4 Ethernet ports

- 4 USB ports – rear: 1 USB 3.2 Gen 1, 1 USB 2.0 and front: 1 Micro-AB USB for iDRAC connection, 1 USB 2.0
- Redundant, hot-pluggable, 600W power supplies
- USB mouse (2 button w/ scroll)
- Local USB country keyboard
- 2 Local power cables
- Dimensions
  - Height 42.8 mm (1.68 inches)
  - Width 482 mm (18.97 inches)
  - Depth 585.3 mm (23.04 inches) without bezel / 598.9 mm (23.57 inches) with bezel
- Environmental (for additional information about environmental specifications, refer to the *Product Environmental Datasheet* located with the Documentation on **www.dell.com/support/home**)
  - Vibration: 0.21 Grms at 5 Hz to 500 Hz (all operation orientations) / 1.88 Grms at 10 Hz to 500 Hz for 15 minutes in storage
  - Shock: 6 shock pulses of 6 G for up to 11ms during operation / 6 shock pulses of 71 G for up to 2ms in storage
  - Temperature: 10-35°C (50-95°F) ASHRAE A2 continuous operation, not in direct sunlight / -40 to 65°C (-104 to 149°F) in storage
  - Relative humidity: 8% with minimum dew point -12°C (10.4°F) to 80% with 21°C (69.8°F) maximum dew point, ASHRAE A2 continuous operation / 5-95% with 27°C (80.6°F) maximum dew point in storage
- Ships with Windows Server 2022 Standard 16 Core with 5 Device CALs installed. **Recovery media should be requested from Dell**.
- This server does not come with the Dell OpenManage Server Administrator DVD. The software agent can be downloaded from the Dell website if needed.
- No DVD Drive, no speakers

[1]DeltaV v14.LTS and v14.FP-Japanese MultiOS versions can run on Server IoT 2022; these are the only v14 releases for which these models are compatible. Refer to KBA NK-1900-0775 for more information on operating systems for v14.x.

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.

Information on upgrading operating systems
Each computer model ordered through Emerson is shipped with a specific operating system. In some, but not all cases, these computers can be upgraded to the next operating system that is compatible with DeltaV. For example, many servers shipped with Server 2016 can be upgraded to Server IoT 2022. The operating system upgrade is via an upgrade kit offered by Emerson, which includes all the appropriate Microsoft licenses needed for the next version of operating system. Please contact your local Emerson service office to inquire if your existing computers are eligible and have upgrade kits available to run the latest operating system.

Computer Ordering Information

Ordering numbers are listed in the sections above. These specifications are subject to change without notice. Computers sold for use with the DeltaV system meet hardware specifications 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 sold by Emerson meet the hardware and operating system specifications for standard DeltaV applications. Contact Dell to order additional memory if needed. Memory from third-party vendors might not be supported. If additional Network Interface Cards (NICs) are required, they should be the same brand and type that is already installed in the computer. Additional NICs will need to be configured after installation. Contact your local Emerson office before making other hardware changes. Failure to consult with Emerson on hardware modifications, other than memory or NICs, may result in poor DeltaV performance and make it difficult to provide technical support for computers that have been modified.

Contact Us
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