



DELL EMBEDDED BOX PC FOR NETGUARDIAN^{SMB}



An industry grade solution for your SMB

Some embedded PC vendors substitute cheaper, unreliable components that can cause expensive downtime and impact your business reputation. They can also provide highly complex systems, which can be difficult to aggregate. Some offer no scalability from small to large quantities, only high volume discounts. Lead times are typically measured in months or quarters, with only basic hardware warranties and no certifications of the device. Canon Solutions America chose to partner with Dell to support NetGuardian^{SMB} to help avoid these pitfalls of the embedded PC market.

Addressing the industrial PC market

Dell now brings to embedded computers (also called industrial PCs) new ruggedized devices, Internet of Things (IoT)-ready, with broad connectivity and backed by Dell's proven brand heritage of business benefits:

- Commercial quality standards for Dell products and suppliers to help reduce risk and improve reliability.
- Enterprise-grade security and manageability options, to support improved protection and flexibility.
- Global service and support, with five-year support program options included, so you have peace of mind.

Ruggedized and ready to put into service

Dell Embedded Box PC's are designed to MIL-STD-810G standards, building on the expertise of rugged device engineers. They are meant to be used 24/7, 365 for a long planned life, headless or with keyboard, mouse, and monitor. Dell Embedded Box PCs are ruggedized, fanless, highly reliable devices for a variety of use cases, including process and discrete manufacturing, fleet management, kiosks, digital signage, surveillance and automated retail solutions. Flexible, with many input/output (I/O) options, they run on powerful multicore Intel® processors. PCI/PCIe card slots provide flexible expansion for new I/O and graphics capabilities. Form factors are optimized for VESA, DIN-rail, and wall mounting, and they come with regulatory, mobile, broadband, and Wi-Fi certifications complete for many countries.

Quality and reliability

Lost availability can cause expensive downtime.

Dell delivers reliability with stringent process and leading validation practices with their embedded PCs. This advanced product reliability engineering occurs at all levels of the product prior to release and with rigorous requirements for Dell suppliers as well.

End-to-end support

With the Dell Embedded Box PC, you also get an end-to-end service solution, including Dell Basic Hardware Warranty and Dell ProSupport for five years, included with every NetGuardian^{SMB} solution.

Model	PC 3000	PC 5000
Dimensions	237 mm wide x 160 mm high x 60 mm deep	246 mm wide x 270 mm high x 107 mm deep
Format Factor	Fanless design, optimized for wall, DIN-rail, and VESA mounting	
Weight	Minimum 2.1 Kg; Maximum 2.25 Kg	Minimum 5.5 Kg; Maximum 5.8 Kg
Processor		Intel® Core i5-6440EQ up to 3.4GHz 4 cores
Operating System	Factory options for Ubuntu Desktop 16.04	
Memory	DDR3L type @ 1600 MHz: 4GB (1x4GB)	DDR4 type @ 2133 MHz: 8 GB (2 x 4 GB or 1 x 8 GB)
Drive/Storage	Client SATA HDD is 500 GB	Client SATA HDD 1 Tb
I/O	Dual Gigabit Ethernet: 2 x RJ-45. USB: 4 x USB2, 1 x USB3. Serial interfaces: 2 x RS-232/485; 1 x RS-232/422 via multifunction port; set by BIOS. GPIO: 12 bit	Dual Gigabit Ethernet: 2 x RJ-45. USB: 4 x USB2, 4 x USB3. Serial Interfaces: 4 x RS-232/422/485 (set by BIOS). GPIO: 16-bit. WLAN, Parallel via PCIe card.
Expansion	None	2 PCI/PCIe slots: riser card options: 2 x PCI
Video	2 simultaneous displays: 1 x DP++ 1.1, VGA. Resolution: Max DP++ 4096 x 2304; max VGA 2560 x 1080 @ 60 Hz.	3 simultaneous displays: 2 x DP++ 1.2, HDMI 1.4, VGA. Resolution: Max DP++ 4096 x 2304; max HDMI 4096 x 2160 @ 24 Hz; max VGA 1920 x 1200 @ 60Hz.
Audio	Via multifunction port: Mic-in, Line-in, Line-out.	Native: Mic-in, Line-in, Line-out.
Power Input	Nominal input 24 V DC (12-26 V). Also accepts Dell AC adapter, 130 W with locking plug.	Nominal input 24 V DC (12-26 V). Also accepts Dell AC adapter, 180 W with locking plug.
Accessories/ Ecosystem	DIN Rail Mounting kit.	
Warranty	Optional ProSupport with on-site service after remote diagnosis, contracts up to 5 years.	
Environmental/Design		
Temp without airflow	Operating: 0°C to 50°C with SSD, 0°C to 40°C with HDD Non-Operating: -40°C to 65°C (-40°F to 149°F)	
Temp with 0.7 m/s airflow	Operating: 0°C to 60°C with SSD	
Relative Humidity	Operating: 10% to 90% (non-condensing) @ 40°C Non-operating: 5% to 95% (non-condensing) @ 40°C	
Vibration During Operation	ASTM-D4169-04, Random Operational Vibration, 0.52 grms MIL-STD-810G, Method 514.7, Procedure 2 MIL-STD-810G, Method 514.6, Procedure 1, Cat 4	
Thermal Shock	-40°C to 65°C 150 cycles 20°C per minute ramp	
Shock	Non-Operating: MIL-STD-810G, Method 514.7, Procedure 5 (Shock) - 75G Operating: MIL-STD-810G, Method 514.7, Procedure 1 (Shock) - 40G	
EMC	CE,FCC, VCCI, and BSMI	
Safety	AS/NZS 60950.1:2011A1:2013, CSA C22.2 No.61010-1 +CSA C22.2 No. 61010-2-201, EN60950-1:2006+A1+A2+A11+A12, EN62311:2008, EN61010-1:2010 ed3+ EN61010-2-201:2013, SASO GSO IEC6090-1:2012, CNS14336-1, UL61010-1+UL61010-2-201	
Altitude	Operating: -15.20 m to 5000 m (-50 ft. to 16,404 ft.) Non-Operating: -15.20 m to 10,668 m (sea level to 35,000 ft.)	
Ingress Protection	IP30, IEC 60529	