



## Dell Edge Gateway 5000 Series



**Collect, analyze, relay and act on Internet of Things data at the edge of the network with this IoT gateway purpose-built for Building and Industrial Automation.**

### **Analytics at the edge**

The Dell Edge Gateway 5000 Series is designed to aggregate, secure and relay data from diverse sensors and equipment. The Intel® Atom™ processor provides capacity to perform local analytics so only meaningful information is sent to the next tier, which could be another gateway, the datacenter or the cloud. This minimizes consumption of expensive network bandwidth and reduces overall solution latency.

### **For IT and Operations Technology**

Unlike PCs and servers, the Dell Edge Gateway 5000 Series is designed for wall or DIN-rail mounting in commercial and industrial environments. Combine the gateway with Dell's IT expertise, choice of operating system and software from our certified, operations- focused ISV partners to meet the needs of both IT and Operations Technology (OT) organizations.

### **Tough for many environments**

Engineered with an industrial-grade form factor and fanless, solid-state design, the Dell gateway can reliably run 24x7 with long life at extended temperatures, in addition to withstanding the higher levels of humidity and dust typical of industrial environments. The Model 5100 supports an operating temperatures from -30xC to 70xC, making it perfect for use in extreme conditions such as boiler rooms or inside rooftop HVAC units.

### **Dell Services and Support**

Dell offers a complete services solution for the Dell Edge Gateway 5000 Series, including Basic Hardware Support and ProSupport with options up to 5 years to provide end-to-end hardware support throughout the product lifecycle. Plus, with our Configuration Service we can configure gateways to your specifications, including custom BIOS settings and factory installation of your software image.

### **Expanded I/O and communication protocols**

Make the most of the equipment you already have and expand capabilities with new technologies. Connect broadly with the physical world using Dell IoT gateways, bridging both legacy systems and modern sensors to the internet. With the right physical I/O and our certified ISV middleware, you can aggregate and normalize virtually any data source, ranging from industry-standard protocols such as BACNet, Modbus and CANbus, to modern wireless mesh networks like ZigBee and 6LoWPAN.

### **Security built in**

You can depend on Dell's broad IT security portfolio. Dell's gateways feature a TPM chip for hardware root of trust, secure boot and BIOS-level lockdown of unused I/O ports. Security is as much about best practices as it is features and Dell offers expertise to build security measures throughout your solution.

### **Flexibility and manageability**

Dell IoT gateways are designed for the flexible manageability that IT requires. Ubuntu and Windows IoT customers get their choice of Dell Edge Device Manager (EDM) or a third-party on-premise console such as Microsoft System Center, backed by the Dell Command Client Suite for both Linux and Windows.

### **Flexible branding options or end-to-end**

Specifically designed for original equipment manufacturers, an OEM-Ready version of the gateway is available or ask us to enable a full IoT system for your specific business need. Talk to us about our cloud, servers, storage, networking and mobility solutions for IoT. We are experts in manageability, security, data integration, analytics and services for end-to-end IoT solutions.

Model Number <sup>1</sup>	Dell Edge Gateway Model 5000 (Commercial version)		Dell Edge Gateway Model 5100 (Industrial version)		
<b>Dimensions</b>	229 mm wide x 216 mm high x 64 mm deep (9 in x 8.5 in x 2.5 in)		229 mm wide x 216 mm high x 75 mm deep (9 in x 8.5 in x 2.9 in)		
<b>Form Factor</b>	Fanless design. Optimized for wall and DIN-rail mounting		Fanless design. Optimized for wall and DIN-rail mounting. Designed for industrial conditions		
<b>Weight</b>	3.0 Kg		3.3 Kg		
<b>Processor</b>	Intel® Atom™ E3825 1.33GHz   2 cores	Intel® Atom™ E3827 1.75GHz   2 cores	Intel® Atom™ E3825 1.33GHz   2 cores	Intel® Atom™ E3827 1.75GHz   2 cores	
<b>Operating system</b>	Factory options for Ubuntu Snappy Core Linux. Windows 10 IoT Enterprise LTSC				
<b>Memory</b>	DDR3L type @ 1067MHz: 2G (4x256Mx16 DDR3L) or DDR3L type @ 1333MHz: 4G (8x 256Mx16 DDR3L) or 8G (8x 512Mx16 DDR3L)				
<b>Drive/Storage</b>	Solid-state drive options (m.2 form factor): 32 GB, 64 GB, 128 GB or 256 GB				
<b>I/O</b>	Dual Independent Gigabit Ethernet (RJ-45) USB: 2 x USB2, 1 x USB3 Serial Interfaces: 1 x RS-232, 2 x RS-485.   1 x RS-422/485. Optional CANbus card   Optional modular I/O expansion interface. 802.11n Wifi +Bluetooth Low Energy; WWAN (3G or LTE). Optional wireless mesh modules: IEEE 802.15.4 ZigBee/6LoWPAN combo module. Plus ISV application support for diverse modern and legacy device connection protocols.				
<b>Expansion</b>	Optional IO Module with PCIe x1, USB: 2 x USB2, Serial Interface: 1 x RS-232, GPIO: 8 bit (4-in, 4-out)				
<b>Video</b>	One HDMI port				
<b>Power Input</b>	Nominal input 24V AC/DC (18 – 26.4V), 4.0 Amps. Optional expansion power module Also accepts standard Dell notebook AC adapter, 65W, 7.4mm plug.				
<b>Accessories/ Ecosystem</b>	Optional Wall mounting kit, DIN Rail Mounting kit, expansion power module, I/O expansion module, IP65 rugged enclosure (built for Model 5100, validated with Model 5000) and antennas: 2-Port Wifi, 2-Port LTE or 4-in-1 LTE/Wifi.				
<b>Environmental/Design</b>	<b>Temp without airflow</b>	Operating: 0°C to 50°C Non-Operating: -40°C to 70°C		Operating: -30°C to 70°C Non-Operating: -40°C to 70°C	
	<b>Temp with 0.7 m/s airflow</b>	Operating: 0°C to 60°C		Operating: -30°C to 75°C	
	<b>Relative Humidity</b>	Operating: 10% to 90% (non-condensing) @ 40°C Non-operating: 5% to 95% (non-condensing) @ 40°C			
	<b>Vibration During Operation</b>	1.54 Grms, All Six Sides tested, 15 minutes per side		1.54 Grms, All Six Sides tested, 60 minutes per side	
	<b>Thermal Shock</b>	150 cycles at system level at spec limits (-40, 85C); **min. 20C/min ramp and 10 min dwells			
	<b>Shock</b>	Non-Operating: MIL-STD-810G, Method 514.7, Procedure 5 (Shock) - 160G Operating: MIL-STD-810G, Method 514.7, Procedure 1 (Shock) - 40G		Non-Operating: MIL-STD-810G, Method 514.7, Procedure 5 (Shock) - 75G Operating: MIL-STD-810G, Method 514.7, Procedure 1 (Shock) - 40G	
	<b>EMC</b>	CE,FCC			
	<b>Safety</b>	61010-1, 61010-2-201 & 60950-1. (IEC/EN/UL/CSA61010-1 and IEC/EN/UL/CSA61010-2-201.)			
	<b>Altitude</b>	Operating: -15.20 m to 5000 m (-50 ft. to 16,404 ft.) [NOTE: maximum operating temperature is derated 1°C/305 m (1000 ft.) above sea level altitude.] Non-Operating: -15.20 m to 10,668 m (sea level to 35,000 ft.)			
	<b>Ingress Protection</b>	IP50, IEC 60529			

<b>Security</b>	Trusted Platform Module (TPM) v2.0 capable for Windows 10 OS and Ubuntu Core 16; Secure Boot, BIOS password and I/O port disablement. Chassis intrusion alerting via optional rugged enclosure.
<b>Manageability</b>	Available Microsoft® SCCM integration (on Windows platforms) and remote cloud management option via Dell Edge Device Manager. All options are purchased as separate submissions.
<b>Software</b>	Support for third-party software solutions, including offerings from our curated IoT technical partners (software, sensors, platforms, etc.) – more information at Dell IoT Solutions Partner Program web site <a href="http://www.delliotpartners.com">http://www.delliotpartners.com</a>
<b>Data integration and analytics</b>	Edge Gateway 5000 Series can support a wide variety of third-party solutions, including offerings from our qualified ISV partners ( <a href="http://www.delliotpartners.com">www.delliotpartners.com</a> ).
<b>Warranty</b>	Commercial services vary. Limited hardware warranty <sup>1</sup> with mail in service; Optional ProSupport with <b>on-site service</b> <sup>2</sup> after remote diagnosis, contracts up to 5 years. <b>Custom warranties available.</b> Restrictions apply. <sup>3</sup>
<b>Configuration Services</b>	Image load, BIOS customization, Laser Etching, Asset tagging and reporting. <b>Custom configuration services available.</b> Restrictions apply. <sup>3</sup>
<b>OEM/Co-branding</b>	OEM-Ready version available: from bezel to BIOS to packaging, your system can look and feel as if they were designed and built by you. For more information, visit <a href="http://Dell.com/OEM">Dell.com/OEM</a> .

## Find more online at [dell.com/IoTgateway](http://dell.com/IoTgateway)

1. For copy of Limited Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 7882 or see [www.dell.com/warranty](http://www.dell.com/warranty)
2. Onsite Service after Remote Diagnosis: Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty ([www.dell.com/warranty](http://www.dell.com/warranty)) and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.
3. Dell Services: availability and terms of Dell Services vary by region. For more information visit [dell.com/servicesdescriptions](http://dell.com/servicesdescriptions).

