



Conserve It

CI-DEG-5000

Control, collect, analyse, 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 Conserve It 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 and control 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 Conserve It Edge Gateway 5000 Series is designed for wall or DIN-rail mounting in commercial and industrial environments. Combine the gateway with Conserve It's IT expertise, choice of operating system and software from our certified, operations - focused value added resellers to meet the needs of both IT and Operations Technology (OT) organisations.

With fully integrated Niagara 4, DGLux or Skyspark, the Conserve It CI-DEG-5000 units are ready for immediate deployment.

Tough for many environments

Engineered with an industrial-grade form factor and fanless, solid-state design, the Conserve It 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. This device supports an operating temperatures from -30°C to 70°C, making it perfect for use in extreme conditions such as boiler rooms or inside rooftop HVAC units.

Conserve It Services and Support

Conserve It offers a complete services solution for the Conserve It Edge Gateway 5000. CI-DEG-5000 can come preconfigured and licensed for Niagara, SkySpark or DGLux5 as per the requirement.

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 Conserve It IoT gateways, bridging both legacy systems and modern sensors to the internet. With the right physical I/O and high level communication devices, you can aggregate and normalise 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

Conserve It'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 Conserve It offers expertise and guidance on security best practice and implementation hardening through our network of value added resellers.

Specifications	Conserve It Edge Gateway 5000	
Dimensions	229 mm wide x 216 mm high x 64 mm deep (9 in x 8.5 in x 2.5 in)	
Form Factor	Fanless design. Optimized for wall and DIN-rail mounting	
Weight	3.0 Kg	
Processor	Intel® Atom™ E3827 1.75GHz 2 cores	
Operating system	Windows 10 IoT Enterprise LTSB with support for Linux OS in future	
Memory	DDR3L type @ 1333MHz: 4G (8x 256Mx16 DDR3L) or 8G (8x 512Mx16 DDR3L)	
Drive/Storage	Solid-state drive options (m.2 form factor): 64 GB or 128 GB	
I/O	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.	
Expansion	Optional IO Module with PCIe x1, USB: 2 x USB2, Serial Interface: 1 x RS-232, GPIO: 8 bit (4-in, 4-out)	
Video	One HDMI port	
Power Input	Nominal input 24V AC/DC (18 – 26.4V), 4.0 Amps. Optional expansion power module Also accepts standard Conserve It notebook AC adapter, 65W, 7.4mm plug.	
Accessories/ Ecosystem	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.	
Environmental/Design	Temp without airflow	Operating: 0°C to 50°C Non-Operating: -40°C to 70°C
	Temp with 0.7 m/s airflow	Operating: 0°C to 60°C
	Relative Humidity	Operating: 10% to 90% (non-condensing) @ 40°C Non-operating: 5% to 95% (non-condensing) @ 40°C
	Vibration During Operation	1.54 Grms, All Six Sides tested, 15 minutes per side
	Thermal Shock	150 cycles at system level at spec limits (-40, 85C); **min. 20C/min ramp and 10 min dwells
	Shock	Non-Operating: MIL-STD-810G, Method 514.7, Procedure 5 (Shock) - 160G Operating: MIL-STD-810G, Method 514.7, Procedure 1 (Shock) - 40G
	EMC	CE,FCC
Security	Trusted Platform Module (TPM) v2.0 capable for Windows 10 OS; Secure Boot, BIOS password and I/O port disablement. Chassis intrusion alerting via optional rugged enclosure.	
Manageability	Available Microsoft® SCCM integration (on Windows platforms) and remote cloud management option via Conserve It Edge Device Manager. All options are purchased as separate submissions.	
Software	Support for third-party software solutions, including offerings from our curated IoT technical partners (software, sensors, platforms, etc.) like Niagara, SkySpark, DGLux5 – more information contact Conserve It IoT Solutions Partner Program web site	
Data integration and analytics	Edge Gateway 5000 Series can support a wide variety of third-party solutions, including offerings from our qualified value added resellers	
Warranty	One-year limited hardware warranty with mail-in service. Optional 3 year or 5 year mail in warranty.	
Safety	61010-1, 61010-2-201 & 60950-1. (IEC/EN/UL/CSA61010-1 and IEC/EN/UL/CSA61010-2-201.)	
Altitude	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.)	
Ingress Protection	IP50, IEC 60529	

Part number	Description
CI-DEG-5011	Conserve It Edge Gateway 5000 series - 3 Niagara Connection, 50 Device / 2500 Points - Niagara/Device count upgrade available – 1 Year Warranty
CI-DEG-5021	Conserve It Edge Gateway 5000 series - 10 Niagara Connection, 100 Device / 5000 Points - Niagara/Device count upgrade available – 1 Year Warranty
CI-DEG-5022	Conserve It Edge Gateway 5000 series - 100 Niagara Connection, 0 Device - Niagara/Device count upgrade available – 1 Year Warranty
CI-DEG-5064-W-HW	Conserve It Edge Gateway 5000 series – 4gb RAM, 64gb storage – Hardware only – Windows 10 IoT – 1 Year Warranty
CI-DEG-5128-W-HW	Conserve It Edge Gateway 5000 series – 8gb RAM, 128gb storage – Hardware only – Windows 10 IoT – 1 Year Warranty
CI-DEG-5DIN	Din Rail Bracket for Edge Gateway 5000
CI-DEG-5WALL	Wall mount bracket for Edge Gateway 5000
CI-DEG-5W3Y	Optional - Replaces existing 1 year warranty with 3 year warranty – mail in service – includes Niagara maintenance for 3 years
CI-DEG-5W5Y	Optional - Replaces existing 1 year warranty with 5 year warranty – mail in service – includes Niagara maintenance for 5 years