



Conserve It

CI-DEG-3000

Extend your Internet of Things control, analytics and security even further to the edge of the network. The CI-DEG-3000 series is compact, low power and ready for challenging field and mobile use cases.

Edge analytics for mobile and field applications

Conserve It Edge Gateways are intelligent devices designed to aggregate, secure, analyze and relay data from diverse sensors and equipment at the edge of the network. These gateways bridge both legacy systems and modern sensors to the internet, helping you to get business insights from the real-time, pervasive data in your machines and equipment.

With fully integrated Niagara 4, DGLux or SkySpark, the Conserve It CI-DEG-3000 units are ready for immediate deployment.

Headless, fanless and around 1kg (2.2lbs), the 3000 Series is our compact gateway for challenging IoT mobile and field situations: single-application processing on manufacturing lines, cargo tracking and other truck/bus/train/marine transportation, retail kiosks, HVAC systems in building automation, managing green energy assets and more. Place them in challenging situations at the network edge.

Small footprint but big connectivity

Engineered with an industrial-grade form factor and solid-state drive, the Conserve It gateway can reliably run 24x7 with long life at extended temperatures. The right-sized 3000 series offers wide connectivity via Wi-fi, Bluetooth LE, optional cellular mobile broadband 3G or 4G LTE for select countries, or 10/100 Ethernet, including Power over Ethernet (PoE)

Easy on power usage

While designed for 24x7 use for many years, the new 3000 Series offers several features for reducing power usage, especially for transportation uses. By targeting I/O and single application computing, we reduced power use in the 3000. The 3000 series offers an ignition wake pin and wake on LAN, with Power On/Standby/Hibernate when using DC power and can support power volt fluctuations down to 6 V. Wake-up events can include alarm, LAN, USB, ignition or direct ignition.

I/O and protocols targeted for use case

All models include a GPS, accelerometer and atmospheric pressure sensor for transportation and geo-referenced asset management. They also have 10/100 Ethernet and PoE. Depending on the targeted model, gateways may support wired (serial or USB) and wireless connections, like a GPIO, video/audio, CAN bus, dual Ethernet and zigbee for wireless mesh networks. Plus, all Conserve It gateways feature a TPM chip for hardware root of trust, secure boot, BIOS-level lock down of unused I/O ports and watchdog timer to provide device-level security.

Conserve It Services and Support

End-to-end service solutions for the 3000 Series include deployment services through authorised value added resellers, CI-DEG-3000 can come preconfigured and licensed for Niagara, SkySpark or DGLux5 as per the requirement.

Specifications	Conserve It Edge Gateway 3000
Processor	Intel® Atom™ E3815 + 400 MHz GPU
Speed / Cache	1.46 GHz / 512 KB
I/O	2 x 10/100 Fast Ethernet (RJ-45). Main port supports PoE (15.4W)Video: DisplayPort 1.1; resolution 2560x1600@60Hz) Audio: 3.5mm Line Out/Line In; RealTek codec for datacompressed, multi-channel streaming.Optional ZigBee module. USB: 1x USB 2.0, 1x USB 3.0 Integrated MEMS: Accelerometer, Pressure, Temperature and Humidity Integrated GPS Wireless LAN: 2.4GHz, 802.11b/g/n/Bluetooth Low Energy 4.0 WWAN/Cellular: 3G or 4G LTE for select countries, US/Canada 4G LTE (WWAN card is factory installed only) Antenna ports for: Wi-Fi/BLE/GPS, 3G or 4G
Dimensions	125 mm wide x 125 mm high x 51 mm deep (4.9 x 4.9 x 2 inches).
Weight	1kg +/- 0.02 kg (2.2lbs +/- 0.04lbs)
Form factor	Fanless and headless. Mounting optimized for 75x75mm VESA, wall (standard) mounting and DIN-rail mounting. Additional mounting options include perpendicular DIN-rail mount, quickrelease DIN-rail mount, and cable management control bars for standard mounting
Environmentals	Rugged enclosure (shock and vibration resistant) for challenging mobile and manufacturing environments. IP50 rating. Operating Temperature: -30C (-22F) to 70C (158F) - true still air environment, no forced air or airflow required (ie. inside a sealed enclosure) Storage Temperature: -40C (0% RH) to 70C (20% RH) Relative Humidity: Operating: 10% to 95% (non-condensing), Non-operating 5% to 95% (non-condensing) with maximum humidity gradation of 15% per hour; up to 70C @ 80% RH Shock and Vibration: Operational and Non-Operational Shock - all axis up to 160G; Operational and Non-Operational Vibration - all axis up to 1.54 Grms, 1 hr/axis; Long Life Vibration - all axis up to 0.79Grms / 5hrs
Power Input	DC-IN or Power over Ethernet (PoE). System power protection. Enables low-power use (ignition wake, wake on LAN). <ul style="list-style-type: none"> DC-IN accepts 12/24 V car power system (12V-57V wide DC input); supports transient low-voltage states (battery crank) ≥6 VDC. Ignition input supports power on/standby/hibernate at 9-32 VDC with a 5-sec delay. Wake up events: alarm, LAN, USB, ignition or direct ignition. PoE is 10/100 Mbps and connects via 8-pin RJ45 port; features full-controller compliance with IEEE 802.3.af standard for maximum 15.4 W, with power up to 48 V over existing Ethernet infrastructure, no modifications required. Standard IEEE 802.3 Ethernet interface provided for 100BASE-TX and 10BASE-T applications (802.3, 802.3u, and 802.3ab, 802.3x) 9014 bytes jumbo frame support. PoE supports wake on LAN.
Storage/Drives	Industrial-grade Micro-SD card: 32 GB (Contact Conserve It OEM Sales for larger options.) Embedded multi-media controller (eMMC 32 GB)
Memory	2 GB, DDR3L – 1066 MHz
Operating system	Microsoft® Windows® 10 IoT Enterprise LTSB 2016 (with Linux OS in future)
Device-level security	Trusted Platform Module (TPM) 2.0; Secure Boot, BIOS password and I/O port disablement. Intrusion switch connector.
3000 Series accessories	Optional accessories include flexible mounting options; pre-certified Wi-fi, GPS, and WWAN antennas Phoenix connectors for serial, CANBus and power; industrial uSD storage options up to 64GB.
Warranty and service	One-year limited hardware warranty with mail-in service. Optional 3 year or 5 year mail in warranty.

Part number	Description
CI-DEG-3311	Conserve It Edge Gateway 3000 series - 1 Niagara Connection, 25 Device / 1250 Points – Niagara/Device count upgrade available – 1 Year Warranty
CI-DEG-3312	Conserve It Edge Gateway 3000 series - 3 Niagara Connection, 50 Device / 2500 Points - Niagara/Device count upgrade available – 1 Year Warranty
CI-DEG-3003-W-HW	Conserve It Edge Gateway 3003 - Hardware only – Windows 10 IoT – 1 Year Warranty
CI-DEG-3DIN	Din Rail Bracket for Edge Gateway 3000
CI-DEG-3WALL	Wall mount bracket for Edge Gateway 3000
CI-DEG-3W3Y	Optional - Replaces existing 1 year warranty with 3 year warranty – mail in service – includes Niagara maintenance for 3 years
CI-DEG-3W5Y	Optional - Replaces existing 1 year warranty with 5 year warranty – mail in service – includes Niagara maintenance for 5 years
CI-DEG-4GANT	Optional – 4G antenna for Edge Gateway 3000