



GEIST

Future Thinking • Solutions Today

► Product **Overview**



Headquartered in Lincoln, Nebraska, Geist designs and manufactures industry-leading technology and software to power, cool, monitor and manage critical data center infrastructure.

We produce affordable, quality products while providing you with superior service. Whether it's enhancing customer care or implementing new technologies, Geist promotes innovation, quality and satisfaction in all aspects of business.



Geist **EMEA**

Geist **APAC**

Geist **USA**

► Design, Assembly and **Testing**

On-site engineering, reliability, conformance and compliance labs allow us to design, manufacture and ship PDUs so they arrive when you need them.

Each new unit is built and approved in our labs before being released to production.



► Fully Compliant - Worldwide Approvals

Conformance labs with a dedicated compliance and reliability engineering team ensure conformance to global standards for safety, reliability and accuracy.



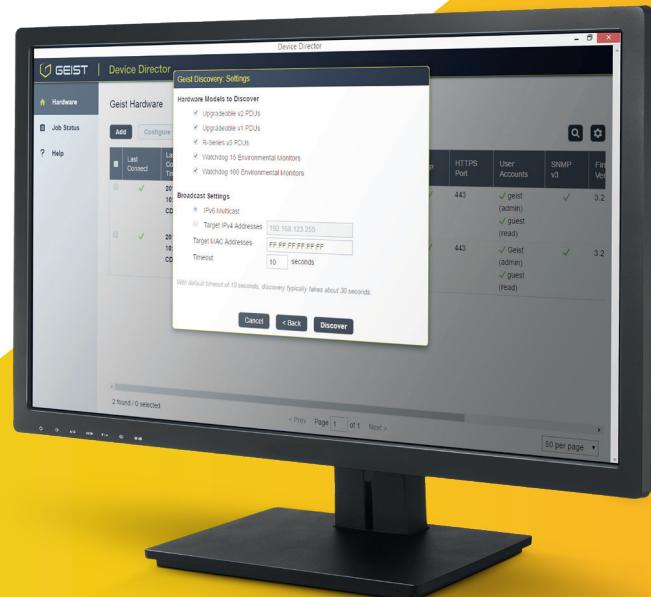
Device Director

Device Director is a comprehensive, Windows-based utility that is used to install, configure and maintain multiple Geist devices within a single interface.

The suite of useful tools helps you set the IP addresses of multiple devices, configure user accounts, modify network settings, update firmware, export/import configuration settings and validate device connectivity.

Device Director gives you a powerful and easy way to mass configure Geist devices, and effectively reduces setup time and maintenance cost.

- Automatic discovery of Geist devices on the network
- Mass configuration of device and network settings
- Bulk firmware updates



Geist Mobile

The Geist Mobile App provides full visibility of the power distribution unit and its power consumption data down to the phase and circuit levels right at your fingertips.

Using Visible Light Communication technology, Geist's Upgradeable line of PDUs optically transmit information to your handheld device providing easy, secure, and instant access to power usage data at the cabinet or rack.

- Real-time capture of comprehensive PDU data
- Automation of PDU inventory management
- Secure & interference free wireless data transmission
- Available on networked and non-networked PDUs



The Broadest Range of PDUs and Custom Options Available

Keep on top of your business power needs with the help of Geist. The extensive selection of data center PDU power products includes features such as upgradeable intelligence, monitoring sensors, low profile breakers and remote management. Whether you are in need of basic products, such as transfer switches or monitored power to help prevent circuits from overloading, put your trust in Geist.

► Basic PDUs

Basic PDUs provide reliable power for critical infrastructure at the rack level. Increase functionality by adding a local display or Inline Meter to receive instant power usage feedback, which will help avoid overloads and costly downtime.

► Monitored PDUs

Power monitoring provides a comprehensive view of power usage in a data center. The local display, combined with remote power monitoring, offers quick access to the PDU's current, volts, real power, apparent power, power factor and kilowatt hours. Monitored PDUs also have the option to monitor power at the outlet level.

► Metered PDUs

Improve reliability, energy efficiency and prevent crippling downtime caused by overloads using Metered PDUs. Equipped with local digital displays, our Metered PDUs provide instant and accurate power consumption data.

► Switched PDUs

Switched PDUs offer the ability to monitor data locally and remotely control individual power outlets. Troubleshoot problematic equipment remotely by managing the power setting of specific outlets. Power can be cycled, enabled, disabled, and monitored at the outlet level.

Finding the Right PDU



Feature	PDU Type						
	Basic	Metered	Monitored	Switched			
Power Distribution	✓	✓	✓	✓			
Current Meter(s)		✓	✓	✓			
VLC Enabled		✓	✓	✓			
Network Interface			✓	✓			
USB			✓	✓			
Environmental Monitoring			✓	✓			
Outlet-Level Monitoring			Optional	Optional			
Outlet-Level Switching				✓			
Upgradeable & Hot-Swappable	✓	✓	✓	✓			
U-Lock Outlets	✓	✓	✓	✓			
1U and Zero U Configurations	✓	✓	✓	✓			
Color Chassis Options							



Intelligent PDUs Power with Flexibility

Geist Upgradeable PDUs give you the flexibility to install the intelligence required today with the option to upgrade technology as needs evolve. From basic power to sophisticated power monitoring with switched and outlet monitoring capabilities, our intelligent PDUs adapt to your business well into the future.

► Fault-Tolerant Daisy Chaining

Simplifies intelligent PDU connectivity and ensures data is reported, even with a break in the chain.

► High Temperature Grade

60°C working ambient variants for high temperature environments.

► Input Power Monitoring

1% Accuracy (ANSI and IEC)

Allows data center managers to accurately reconcile power usage.

► Low-Profile Breakers

Compact profile to install in tight spaces for units requiring breakers.



U-Lock Outlets

Securely lock cords in place using the patented U-Lock technology. Each outlet is color coded by phase and/or circuit to assure load balancing is easily achieved.

Environmental Monitoring

Monitor environmental conditions such as airflow, temperature, humidity and dew point and more.

USB Integration

Utilize USB for enhanced data logging, firmware updates and optional WiFi support.

Alternating Outlets

Better manage power cables within the rack and reduce your risk of downtime with phase alternated outlets.



Upgradeable Intelligence

Hot-swap Interchangeable Monitoring Devices (IMD) without interrupting power to critical equipment. Functionality options are available from basic to power monitoring with environmental sensing.

LED Rotatable Display with VLC

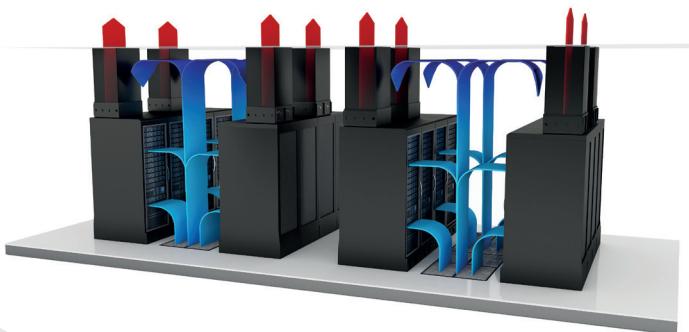
View power data easily in dimly lit areas and rotate the display to match the mounting configuration. Utilize VLC via the Geist Mobile App to access real-time power monitoring data at your fingertips.

Maximize Cooling **Efficiency**

Geist offers sophisticated airflow management to data centers of any size and capacity. By containing and channeling hot air, Geist delivers significant cost savings while improving the long-term reliability of mission-critical IT equipment.

► ActiveAir™ Intelligent Airflow Management

ActiveAir Containment System focuses on two critical components:
1) containing heat and 2) expelling heat directly to the CRAC units.
This two-step process maintains and stabilises an optimal temperature
for data center equipment.



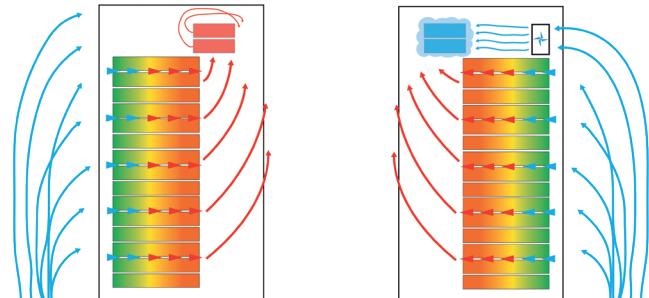
Say Goodbye to Fried Switches

► SwitchAir® Cooling

Network switches, load balancers and routers typically sit at the top and back portion of the rack. This placement makes it difficult for cold air to travel from the front of the rack to the air intakes of the network switch equipment, increasing chances of failure over time. SwitchAir helps prevent failure by channelling cool air from the front of the rack back to the air intakes regardless of where the equipment is mounted.

SwitchAir is designed to work with 1U to 9U devices with configurations available to accommodate a variety of network switch equipment.

Active



Network switches mounted at the top and rear of the rack are susceptible to heated air from the servers. This hot air is recirculated, putting stress on the device.

SwitchAir products direct cool air to the network switches, significantly lowering operating temperatures.

Passive

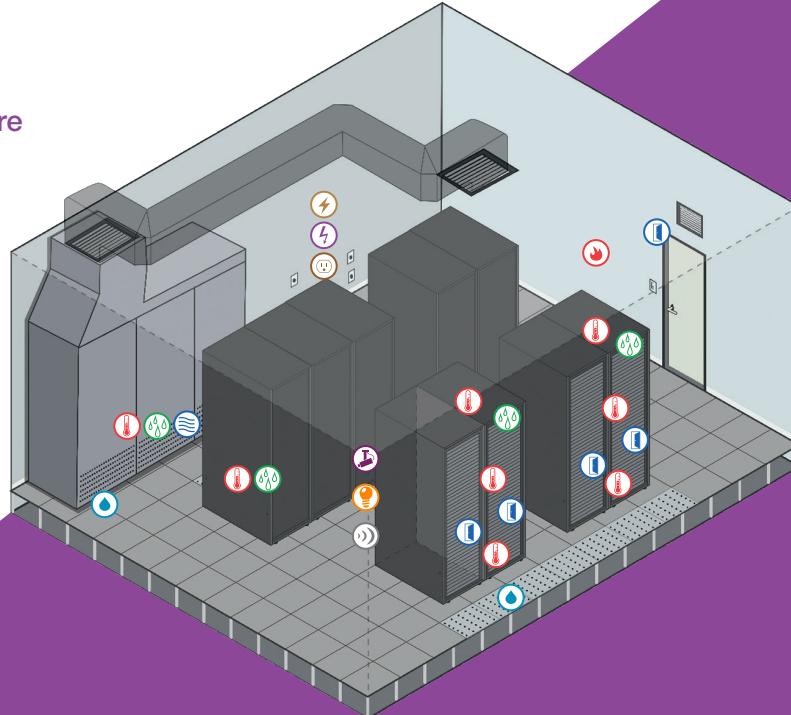


Proactively Monitor Your Data Center

Geist's Watchdogs enable you to keep an eye on remote conditions in critical areas for a variety of environmental parameters. Get alerts via Email, SMS, and SNMP when user-specified thresholds are breached and proactively resolve issues to prevent downtime and equipment failure.

Keep an eye on environmental conditions surrounding your mission critical infrastructure

- | | |
|--|--|
|  Temperature |  Humidity/Dew Point |
|  Airflow |  Sound |
|  Power Failure |  Door Position |
|  Smoke |  Voltage |
|  Light |  Water Leaks |
|  Amperage |  Video |



► Watchdog 100/100P

The Watchdog 100 combines climate monitoring with remote relay control. The unit comes equipped with an on-board temperature/humidity/dew point sensor and can accommodate up to eight external sensors. The unit may be ordered with built-in Power-over-Ethernet (PoE).



► Watchdog 15/15P

The Watchdog 15 is a self-contained environment monitor with an on-board temperature and humidity sensor. Equipped with two digital sensor ports, the Watchdog can support up to four external sensors using a splitter. The Watchdog 15 is the most cost-effective solution in the market for monitoring temperature, humidity and other environmental parameters.



► GTHD/GT3HD

Temperature, Humidity, Dew Point Sensor Kit

The GTHD & GT3HD sensors collect and transmit real-time temperature, humidity and dew point data to protect critical data center equipment from heat and moisture. The GTHD model offers two RJ12 ports, an uplink port to connect to a host device and a supplementary input for daisy-chaining. The GT3HD comes equipped with two additional inputs to accommodate the 3 FT and 6 FT temperature sensors kitted with the unit, ideal for monitoring top, middle and bottom of a server cabinet.



Wireless Monitoring for Your Data Center

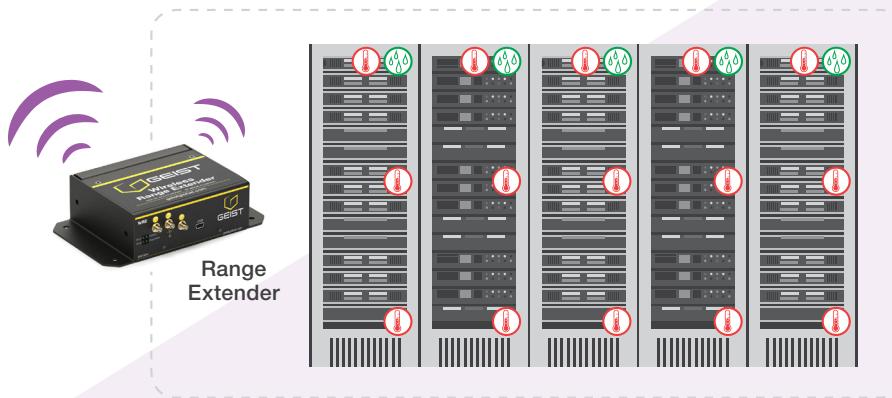
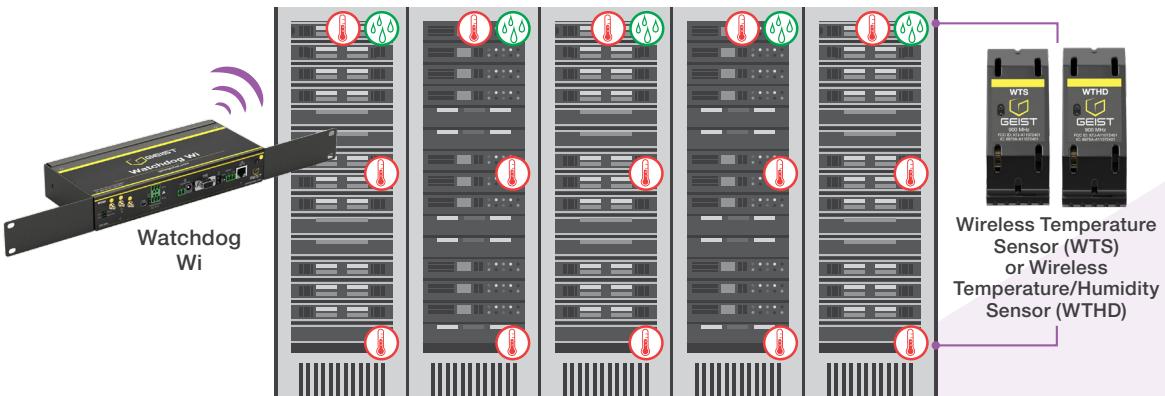
► Watchdog Wi Wireless Sensor Gateway

Keep an eye on environmental conditions in your data center, server room and network closet environments to protect critical infrastructure and prevent system downtime, hardware damage and data loss. The Watchdog Wi system of wireless sensors allows you to monitor temperature, humidity and dew point in a variety of areas while reducing installation time and costs associated with hard-wired sensors.

Get alerts via email, email-to-SMS and SNMP traps when user-specified thresholds are breached. The Watchdog Wi comes equipped with high powered relay outputs to activate external devices when alarmed.



ZONE 1



► Get alerts via email, email-to-SMS and SNMP traps when user-specified thresholds are breached. The Watchdog Wi comes equipped with high powered relay outputs to activate external devices when alarmed.

Easy. Intuitive. Effective. **Simply Intelligent DCIM**

Data center management can be complex, but Geist's DCIM solutions simplify the process. Data Center Infrastructure Management (DCIM) consolidates disparate systems into one comprehensive pane of glass. With the Environet and Racknet product lines, Geist is committed to providing high quality data center solutions as well as industry-leading customer service.

Environet **The Ultimate Monitoring and Management Solution**

Environet simplifies monitoring by integrating multiple communication protocols into one complete system. It provides the data granularity required for efficient management of both the facility and the data center infrastructure. Complexity is transformed into simplicity with unprecedented visibility and management over environmental parameters, power consumption and cooling.



Real-Time Monitoring

Receive alerts for urgent warnings and alarms the second they occur.

Analytics and Reports

Report on your data center infrastructure to compile meaningful data for critical business decisions and compliance requirements.

Extensive Toolset

Feature rich tools such as tenant management, power one-lines and capacity planning help make informed decisions to improve data center performance.

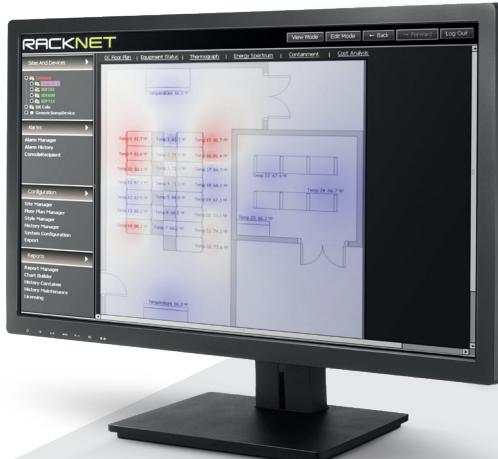
API and Integration

Geist's RESTful API provides a simple, reliable and scalable solution for businesses looking to integrate information between multiple software systems.

Racknet A Versatile DCIM Solution

A standalone, entry-level DCIM solution, Racknet provides a comprehensive set of features for managing rack level data with a single point of integration.

The auto-discovery feature makes installation fast and simple. Utilize the intuitive interface to easily drag and drop configurations, giving complete in-house customization capability. Once integrated, all communicating devices and points can be trended and used in reports.



		Environet	Racknet
Communication	SNMP	•	•
	BACnet	•	-
	Modbus	•	-
	LONworks	•	-
	Hardwired I/O	•	-
	API	•	•
Design	System Configuration	turn-key	user
	Vendor Neutral	•	•
	Consulting Services	•	optional
	Professional Installation	•	optional
	Support Contract	•	•
Features	Real-time Monitoring	•	•
	Notifications and Alarms	•	•
	Business Analytics	•	-
	Energy Cost Analysis	•	*
	Power One Line	•	-
	PUE/DCIE	•	*
	Unique Floor Plans and Views	•	*
	Key Performance Indicators	•	*
	Power Capacity Planning	•	-
	Asset Management	•	-
Integration	Raised Floor/White Space	•	•
	Electrical/Mechanical Rooms	•	*
	Fire Suppression Systems	•	*
	Building Management Systems	•	*
	Security Systems	•	*
	Other Custom Systems	•	-
	Workflow Management Systems	•	-

*Contact Geist DCIM about customized product options



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