

OpenData® Environmental Management Module

Modius OpenData's Environmental Management Module uses data collected from wired and wireless sensor arrays for operational analysis and environmental control.

Data Center Environmental Management

Historically, Data Centers and other environmentally sensitive facilities have been drastically over-provisioned to insure that unplanned downtime wasn't the result of inadequate resources like power, space and cooling capacities. But as the price of energy has risen, the pressure to reduce operational costs has forced data center managers to find ways to improve the efficiency of cooling technology without risking heat related failures or reductions in the equipment's useful life.

The key to maximizing cooling efficiency is the availability of robust, multi-site, real-time environmental monitoring, providing the granular data needed to make informed decisions about the costs and risks associated with efficient power, space and cooling.

OpenData® Environmental Management Module

The OpenData Environmental Management Module (EMM) collects data in real-time from a combination of wired, wireless, and on-board sensors, creating a flexible sensor array to monitor and measure temperature, humidity, pressure and power. OpenData EMM provides a consolidated and manageable set of usable metrics to support environmental decision-making and superior automation of climate control systems.

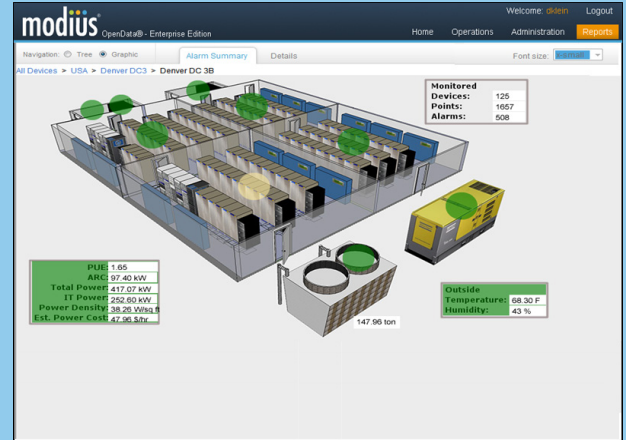
Standard features include:

- Comprehensive, flexible, sensor array of real-time environmental data (Temperature, Humidity, Pressure and Power).
- Granular levels of environmental monitoring at the device, rack, room, pod, zone, etc.
- User-friendly data transformation algorithms to build environmental performance metrics for analysis and improvement.
- Pre-defined Dashboards for environmental monitoring during commissioning and ongoing operations.
- Visual trending and alarm/alert escalation to reduce the risk of heat related downtime.
- Normalized integration interface to environmental control systems (BMS).

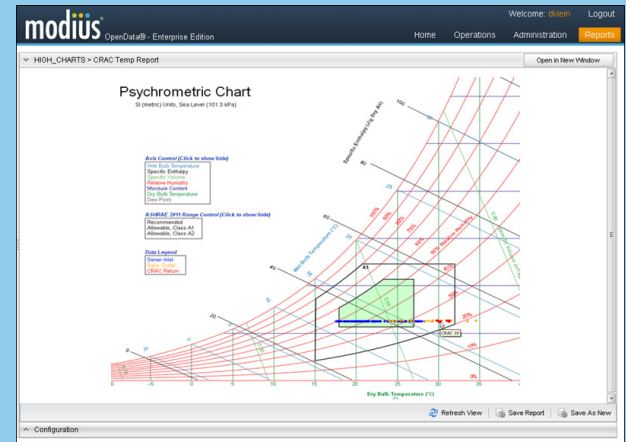
OpenData EMM provides real-time environmental monitoring and historical performance analysis to support better decision making (manual and automated) for optimizing your data center's power and cooling controls and associated energy efficiency, saving you time and money!

Selected Screen Shots

Global Monitoring for Power & Cooling Alarms/Alerts



Measure compliance with ASHRAE TC 9.9 Recommended and Allowable Usage Envelopes



Thermal Mapping of Temperatures by Elevation and PUE By Zone







About Modius

Who We Are and How We Help

Modius® Inc. is a leading supplier of Data Center Infrastructure Management (DCIM) solutions for optimizing data center infrastructure and operations. Modius develops and commercializes real-time monitoring and analytics solutions that enable unified visibility and better control over the critical systems in your data center, including power, cooling, network connections, and space.

The company's mission is to simplify the operations of the increasingly diverse and complex facilities and IT environments, while markedly improving performance efficiencies. Founded in 2004 with headquarters in San Francisco, California, Modius has customer deployments world-wide.

Modius OpenData® Value Propositions

<p>Protect Mission-Critical Assets</p>  <ul style="list-style-type: none"> • Faster response • Failure point reduction • Alarm redundancy • SLA statistics 	<p>Lower Data Center Costs</p>  <ul style="list-style-type: none"> • Energy cost savings • Real-time measurement • Better FTE leverage • Continuous improvement 	<p>Increase Data Center Capacity</p>  <ul style="list-style-type: none"> • Track loads • Forecast growth trends • Balance power & cooling • Track "drift" 	<p>Report Eco-Efficiency Metrics</p>  <ul style="list-style-type: none"> • Track GHG emission • Set baselines • Demonstrate gains • Prepare for DOE & EU compliance
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Environmental Management Benefits

The *OpenData* Environmental Management Module provides the following benefits:

- Improved Operational Efficiency
- Reduced energy consumption
- Risk Reduction (Unplanned Outages)
- Extended equipment life
- Improved MTTD and MTTR metrics

Technical Specifications:

Modius OpenData® is a software application that can either be installed on-premise or hosted in the cloud. The application installs on Windows Server 2008, 2008 R2, 2012, and runs Express, Workgroup (Up to 2012), or Enterprise versions of MS SQL Server 2008 - 2016. Many customers choose to run the application within VMWare ESX. For more information, please contact us at info@modius.com.

How to Buy *OpenData* Environmental Management

Whether you are managing a small data center or multiple facilities across the globe, Modius has an *OpenData* version that provides all the capabilities that organizations look for in a DCIM solution. The Environmental Management Module supports both Standard and Enterprise versions of the *OpenData* platform, providing affordable environmental management for every company.

Standard Edition (SE)

An infrastructure monitoring & data collection solution for single-sites.

- Unlimited support for all networked infrastructure
- Embedded MS-SQL Express Database (10GB Limit)
- Multiple levels of alert escalation
- Fully upgradeable to Enterprise Edition

Enterprise Edition (EE)

A complete Data Center Infrastructure Management solution for multiple sites.

- Dynamic Power Management (DPM Module)
- Complete Asset Management (AMM Module)
- Advanced Analytics (Charts & Dashboards)
- Advanced Integration Support (Database, API's)

Easy and Affordable!

With *OpenData*, environmental management has never been more affordable and easy to implement. Existing *OpenData* customers can upgrade their Standard and Enterprise editions for an uplift of their current license fees. New *OpenData* installations require a server license and nominal fees (by device class) for only the assets under management. With unlimited access for everyone in your organization, *OpenData* provides the information needed to make better operational decisions for your data center.