

# PowerHawk<sup>®</sup> Manager

## Metered Resource Management SaaS

PowerHawk<sup>®</sup> Manager is a complete Metered Resource Management System that combines automated data collection, powerful analysis tools and flexible billing capabilities with “cloud-based” software delivery.

Focused on Metered Resource Management (energy, water, gas and monetizable derivatives such as Green House Gases), PowerHawk Manager delivers stakeholders as much or as little information as they need, at the office or remotely — 24/7. And with PowerHawk Manager's live update dashboard, all stakeholders can be kept apprised of critical resource use information in a timely and convenient way, either on personal devices or on public monitors.

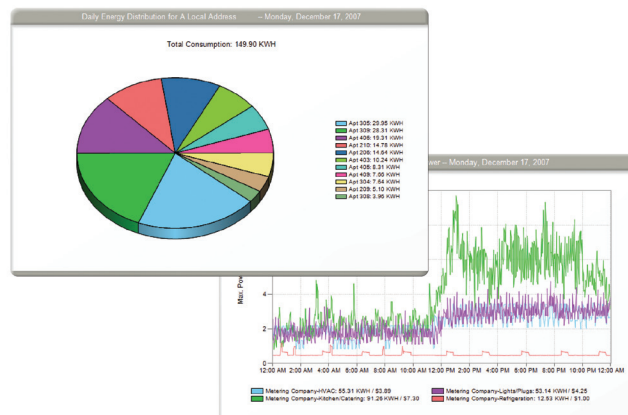
### PowerHawk Software as a Service

Most multi-tenant metering systems are managed through onsite meter management systems, proprietary gateways, or dedicated server-based applications. Installing these systems presents obstacles to provisioning, accessibility, flexibility, and management. With PowerHawk Manager Software as a Service (SaaS), there are no distracting set-up issues or deployment costs, no software licensing fees, and there's no hardware to buy.

- ✓ Pinpoint resource savings opportunities, create an accurate picture of a building's carbon footprint & identify failing equipment and expensive peak demand charges
- ✓ Track cost and accurately allocated to specific building systems or directly to departments or building occupants
- ✓ Manage an entire meter network remotely — including provisioning, alarms, maintenance, meter configuration and firmware upgrades
- ✓ Analyze resource usage (electrical, gas, water) & identify malfunctioning equipment
- ✓ Encourage timely and appropriate intervention through live dashboard and desktop information updates
- ✓ Integrate with other building management and IT systems via flat-file or California Meter Exchange Protocol (CMEP)



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With PowerHawk Manager, any energy stakeholder can distill meaningful information from electricity, gas, water and BTU meters to pinpoint savings opportunities, create an accurate picture of a building's carbon footprint and identify failing equipment and expensive peak demand charges.

### Cost Communication

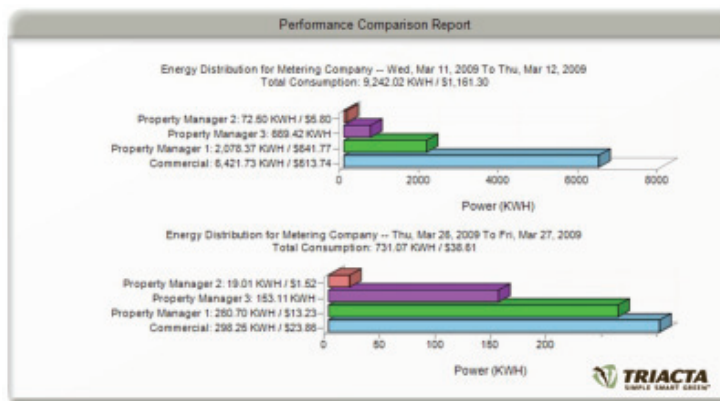
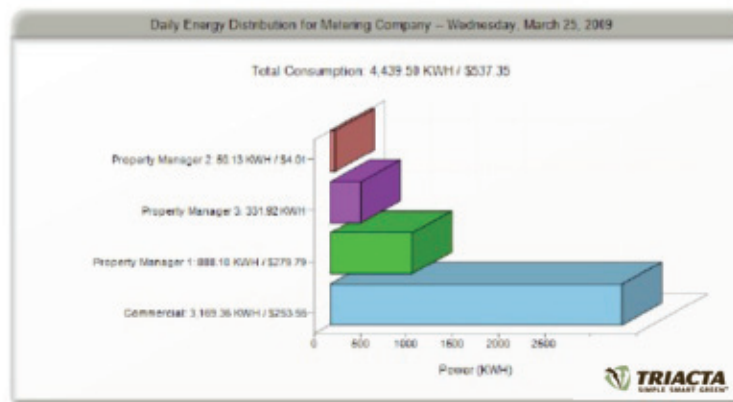
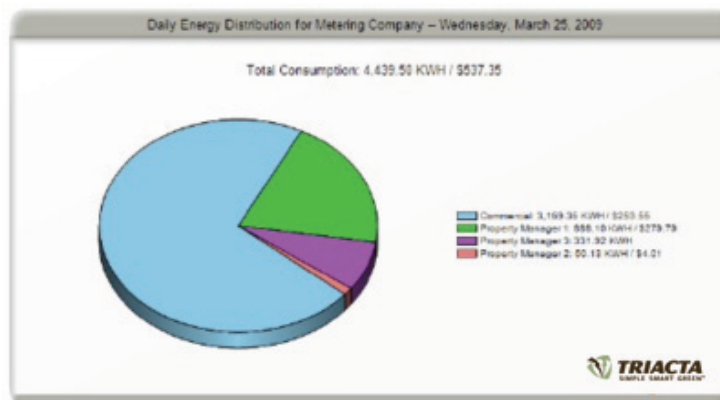
The arrival of time-of-use billing and peak demand charges means additional meter reading and complicated billing requirements. PowerHawk Manager handles these requirements automatically, so costs can be tracked and accurately allocated to specific building systems or directly to departments or building occupants.

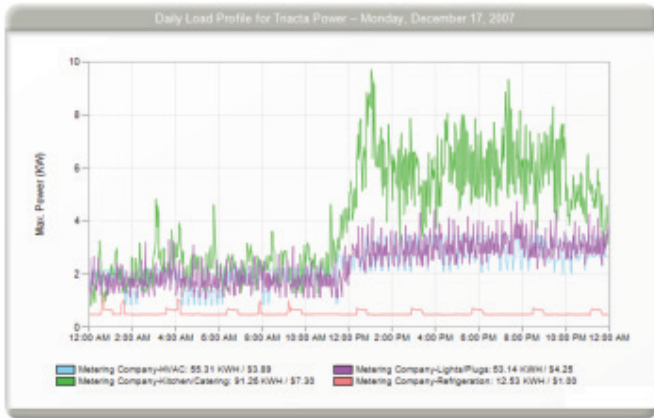
PowerHawk Manager has a suite of tools for communicating resource costs. A flexible and powerful facility for creating rates and service fees can apply them to any set of meters in the hierarchy, right down to a single meter if required. A hierarchy could have a different rate plan applied to every meter if needed.

### Metered resource reporting services

In addition to cost communication, PowerHawk Manager has robust visualization and reporting tools for monitoring and analyzing resource usage. Users can use their secured account to view reports through a standard web browser, or have customized scheduled reports delivered to them directly through email. PowerHawk Manager provides the following types of reports:

- *Resource Distribution Reports* for analyzing resource consumption and identify opportunities for savings
- *Resource and Load Profile Reports* (with “what if” analysis capabilities) showing resources consumed over different time intervals for determining potential impact of changes to equipment or process
- *Demand Profile Reports* for identifying resource consumption peaks and uncovering opportunities for demand charge reductions
- *Power Quality Reports* (voltage, current, active power, reactive power, apparent power and power factor) for analyzing the interaction of electrical power with equipment to identify potential power quality issue that may be affecting equipment operations





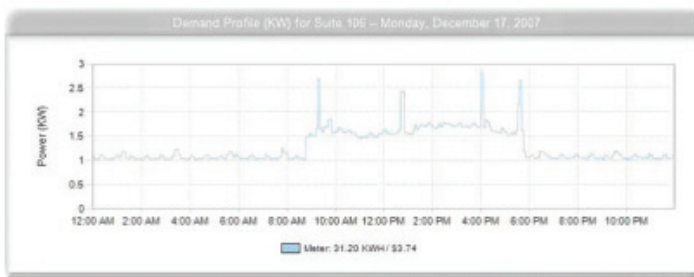
### Open protocols ensure a future proof solution

All PowerHawk metering systems use open protocols (including building automation protocols) to ensure users are not “locked in” to a single vendor. This open system provides the flexibility needed in an evolving smart grid. PowerHawk Manager also uses open protocols to communicate with other systems, using flat file Comma Separated Values (CSV) files, CMEP and other open standards.

The power of using a SaaS solution is that as new standards evolve for the smart-grid, the PowerHawk manager keeps pace without any user worries.

### Multi-vendor meter management

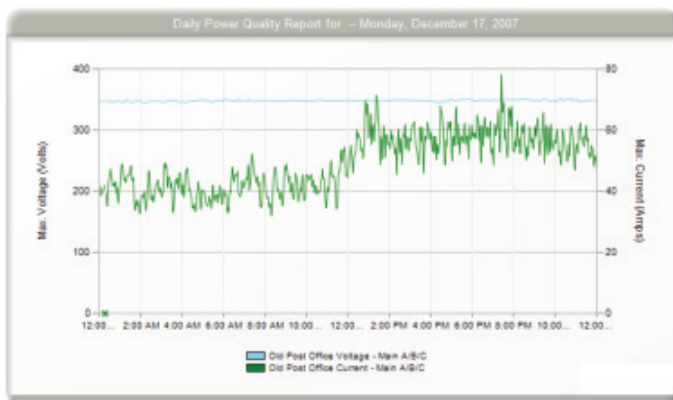
Many meters, building management system gateways, and meter pulse collection boxes produce CSV data files of a similar format. PowerHawk Manager can associate specific columns in a CSV file with resource parameters — allowing third party meter-points to be managed as native PowerHawk meters. This provides users with the ability to manage a heterogeneous meter environment through one simple, efficient interface. Triacta offers custom meter integration.



### Integrating with other services

Web services protocols such as XML-RPC and SOAP allow SaaS applications to rapidly integrate with other services and solutions, creating powerful “mashup” opportunities.

PowerHawk Manager, for example, provides revenue grade analysis of metered resources while Building Management Systems deliver real-time alarm, control, and response of building systems. When combined, these solutions create a powerful “demand response” system that can efficiently manage resources while supporting regulatory reporting requirements and customer efforts to improve efficiency.



### Live information update display of information

It is often a requirement to display a single meter point or aggregate of meter points on a public monitor, or running on a users desktop. PowerHawk Manager provides live

update display of any meter (single point or aggregate) in a format suitable for public viewing. The dashboard shows actual vs. target use over time — with a concise table showing total usage quantities, quantities per stakeholder, total dollars and dollars per stakeholder.

### Meter provisioning and management

PowerHawk Manager has built in provisioning tools to translate on-site audit information into appropriate PowerHawk meter configurations and installation instructions. When deploying hundreds of meters across a distributed geographic footprint, this is a key consideration that results in big commissioning savings.

PowerHawk Manager includes an extensive set of meter management tools that allow operators to monitor network health and receive notification of extraordinary events in the network — so timely interventions can be made to ensure meter network health.

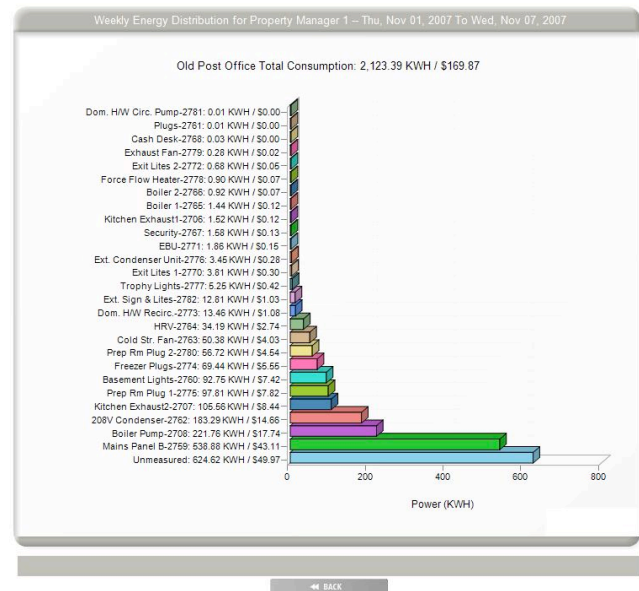
### Powerful user administration capabilities

To properly manage metered resources, the right information needs to get to the right people at the right time. PowerHawk Manager has an extensive and flexible administration, configuration, and management hierarchy that allows multiple scopes of view and command. Multiple hierarchies for the same meter set can be created, enabling different view perspectives — such as departmental, tenant, property, or services provider.

Additionally, “virtual meters” can be created and fed by any combination or portion of multiple meters — allowing for the attribution of common resource usage to multiple parties.

### UI Flexibility

As a web-based solution, the PowerHawk Manager user interface is decoupled from the application and data layer — allowing for rapid change and flexibility. PowerHawk manager can take advantage of advances in browser technology as soon as they are available to advance functionality and enhance the user experience. This also makes the application immediately multi-platform.



### More Information

For more information about Triacta's smart submetering solutions visit [www.triacta.com](http://www.triacta.com), email [info@triacta.com](mailto:info@triacta.com) or call 1-877-797-4295, 1-613-256-2868, or in the U.S. 1-214-296-2142