



Stark's Energy Management Reader System

The Proven Way to Make Real Energy Savings

One Unified System, Three Powerful Applications

Stark Reality is a unified AMR, Data Management and Energy Information System, delivering unrivaled flexibility to meet the challenging demands of today's market.

Before you can drive down energy expenditure and reduce CO2 emissions, you need to know exactly how your organization is using energy. With Reality you get a detailed analysis of all of your energy usage - by building, department, product, cost center and shift.

Key Benefits

- ✓ Discover energy waste
- ✓ Cut energy consumption
- ✓ Save on your energy bills
- ✓ View all utility data in one place
- ✓ Reduce CO2 emissions
- ✓ Procure energy at the lowest rates
- ✓ Schedule automatic exception reports

Simplicity with Power

Reality's user interface has been engineered for simplicity. That means a minimal learning curve to get your energy management system up and running. And behind that simplicity is a powerful software package that's capable of complex data manipulation — even for the most demanding of applications.

Email us at sales@transdatainc.com for more information



You Manage the Energy. We'll Manage the Data.

Too often, implementing and operating a monitoring program leaves little time to spend on managing energy. Why not consider letting us handle the operation of your program? We'll do all the data collection, validation and report configuration and give you access to all your information via a secure web server. That leaves you free to manage your energy, so you can start to make big savings on energy consumption.



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Reality's advanced reporting capability gives you over 120 standard report templates to choose from:



✓ Combines data collection, data management and data reporting system into a single, unified solution

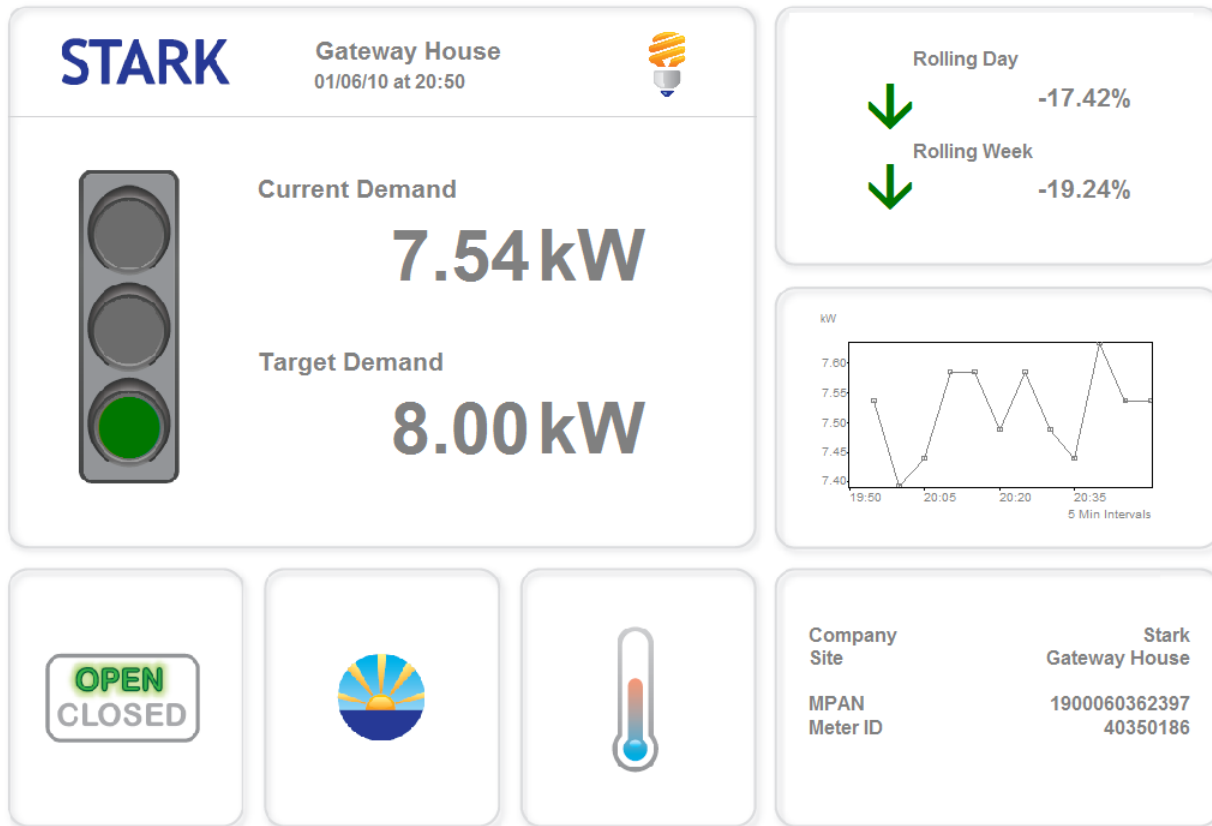
✓ Enter performance targets online for each of your buildings and change the site-specific parameters whenever you want

Sample Carbon Dashboard Report with specified consumption thresholds for multi-utility system



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✓ User-configurable parameters enable you to tailor reports to your precise requirements

✓ Scalability allows for support of anything from one meter on a single site to thousands of meters on multiple sites.

Sample Consumption Dashboard Report with specified thresholds and usage data



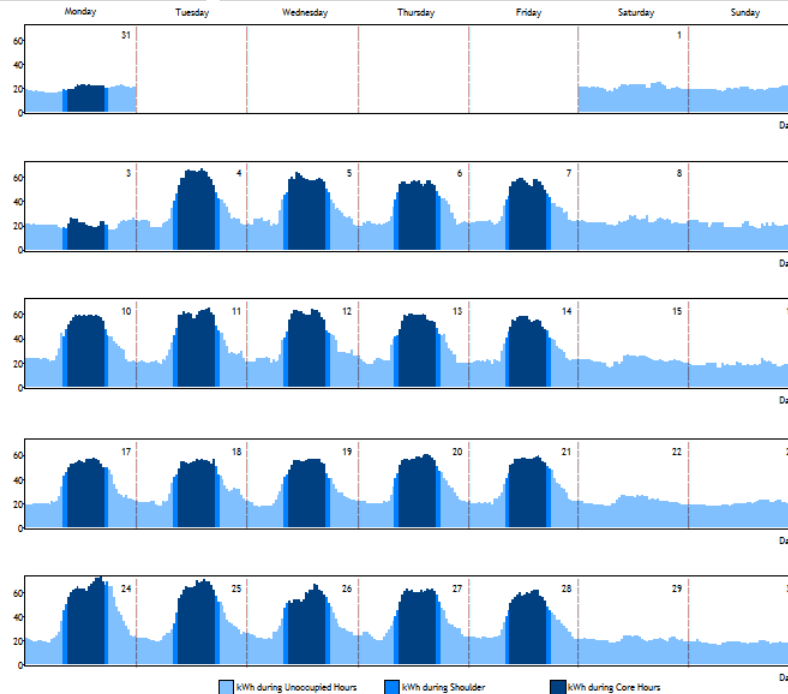
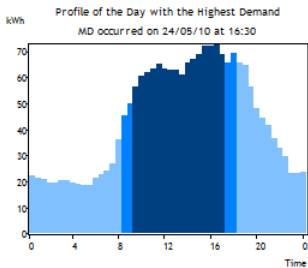
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Stark Reality provides you a detailed picture of exactly how much energy you are using - as well as where and when.

SavenergyOnline <small>Powered by STARK</small>		Profile - Month by Interval - Occupancy - Electricity		<small>powered by</small> STARK	
Company:	Stark Demo Site	Month:	May 2010		
Site:	Office Block				
MPAN/Meter ID:	N/A / N/A				

Readings	
Previous	(06/04/10 at 00:01) 0
Present	(04/05/10 at 00:01) 0
Consumption	
Core (kWh)	18,566
Shoulder (kWh)	3,721
Unoccupied (kWh)	25,806
Av Core Interval (kWh)	
Av Core Interval (kWh)	55.3
Av Shoulder Interval (kWh)	44.3
Av Unoccupied Interval (kWh)	24.2
Av Unoccupied/Av Core %	
Av Unoccupied/Av Core %	43.73
Av Shoulder/Av Core %	80.17
Demand	
MD (kW)	144.7



Report Time Zone: (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

✓ Occupied vs. unoccupied energy reports mean you can zero in on when waste is occurring and manage it effectively

✓ And if the system identifies any areas of waste, it alerts you by email.

Sample Occupancy Report for usage data during occupied vs. unoccupied building hours



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Multi-utility reports allow you to view gas, electricity and water data in a single report and integrate this with your production and environmental data.

SavenergyOnline
Powered by STARK

Comparison - 4-Week by Day - Multi-Utility - EGW

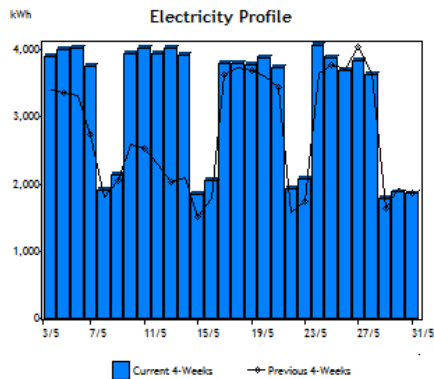
powered by
STARK

Company:
Site:

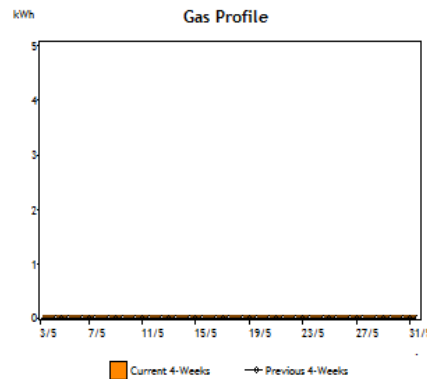
Stark Demo Site
Upper School

Report From:

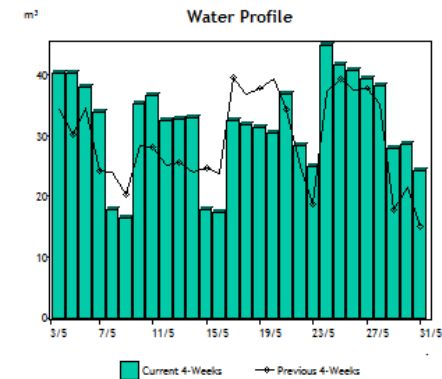
04/05/10 to 31/05/10



4 Week Total - Current (kWh)	90,847
4 Week Total - Previous (kWh)	76,994
% Diff	17.99
Daily Average (kWh)	3,245
MD (kW)	329.78



4 Week Total - Current (kWh)	0
4 Week Total - Previous (kWh)	0
% Diff	-
Daily Average (kWh)	0
Max 30 Minute Interval (kWh)	0.00



4 Week Total - Current (m³)	892.9
4 Week Total - Previous (m³)	819.3
% Diff	8.98
Daily Average (m³)	31.9
Max 30 Minute Interval (m³)	2.05

Report Time Zone: (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Sample Multi-Utility Comparison Report of Current and Previous 4 Week Usage



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Customized reporting provides detailed analysis of electricity usage by minute, day, week and month

SavenergyOnline
Powered by STARK
Comparison - Week v Previous Weeks - Electricity
powered by
STARK

Company: Stark Demo Site

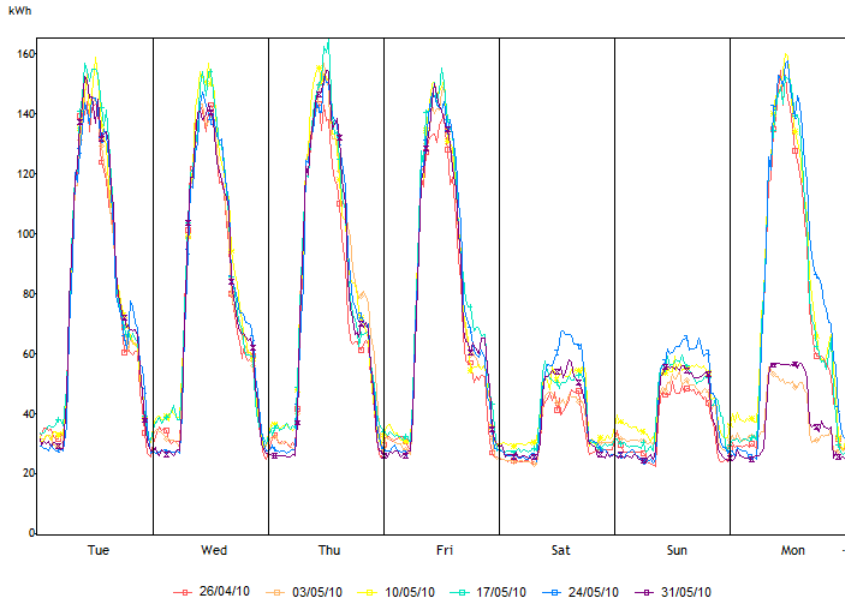
Site: Upper School

MPAN: N/A

Meter ID: N/A

Report Week Ending: Mon 31/05/10

Report Run Date: 01/06/10 at 21:55:31



Week Ending	Cons kWh	MD kW
26/04/10	21,396	309.7
03/05/10	20,539	314.0
10/05/10	23,636	320.2
17/05/10	23,528	329.8
24/05/10	23,181	315.8
31/05/10	20,503	309.6

Comparison

Average	22,456 kWh	○
This Week	20,503 kWh	
% Diff to Average		○
-8.7 %		
Red Light	>+0.5%	●
Amber Light	>-2.0% and <+0.5%	
Green Light	<-2.0%	

✓ Schedule management reports to be automatically emailed to you, so you don't have to remember to run them yourself

✓ Automatic exception reporting allows you to address problems as soon as they occur

Sample Comparison Report from current and previous week's electricity consumption



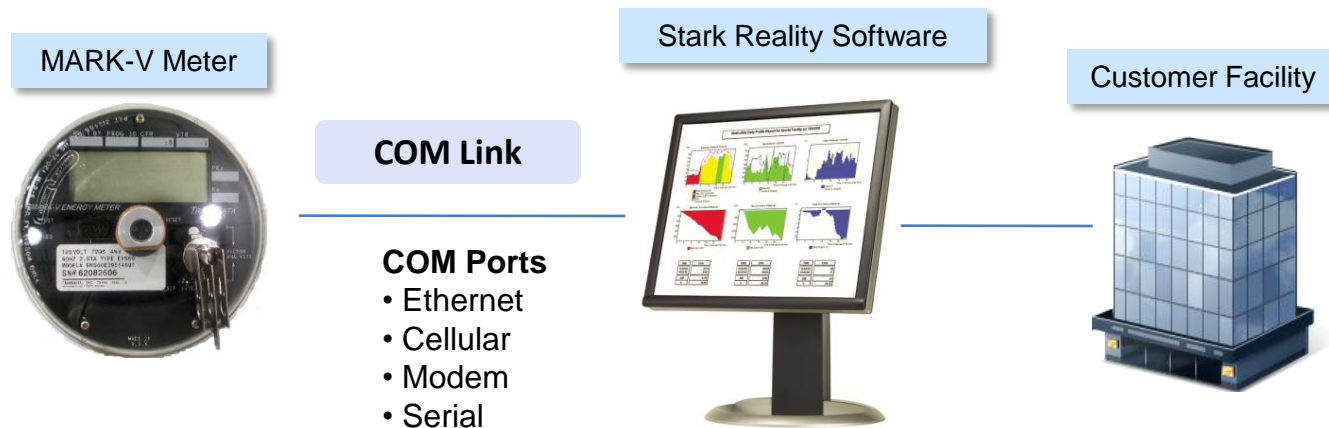
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MARK-V Energy Meter

Advanced High-Accuracy Meter with Integrated Data Telemetry Solutions and Power Quality Monitoring

The versatile MARK-V Energy Meter provides users with an innovative and cost-effective smart grid revenue metering solution to more efficiently measure, manage and communicate energy flow data.



MARK-V Key Features

- 4-Quadrant Bidirectional Energy Meter
- $\pm 0.06\%$ Load Range Accuracy
- ANSI C12.1, C12.20 Certified, Measurement Canada Approved Revenue Meter
- Power Quality Monitoring System with Event Recorder
- Multi-Processor Real-time Operating System, No Buffering Delays
- Power Quality Monitoring with Event Recorder and Event Notification
- Real-Time Transformer & Line Loss Compensation with Test Mode
- Socket, Switchboard and A-Base Mounting Configurations

MARK-V Billing Register/Interval Data Recorder

- Ethernet, Digital Cellular, Telephone Modem, RS232/RS485 Serial, Optical Port
- 4 or 8 Channel Interval Data Recorder
- Programmable 1-60 Minutes Intervals
- Maintenance Free LiRAM Memory – NO Batteries to Replace
- Programmable Usage, Demand and Time-of-Use Registers

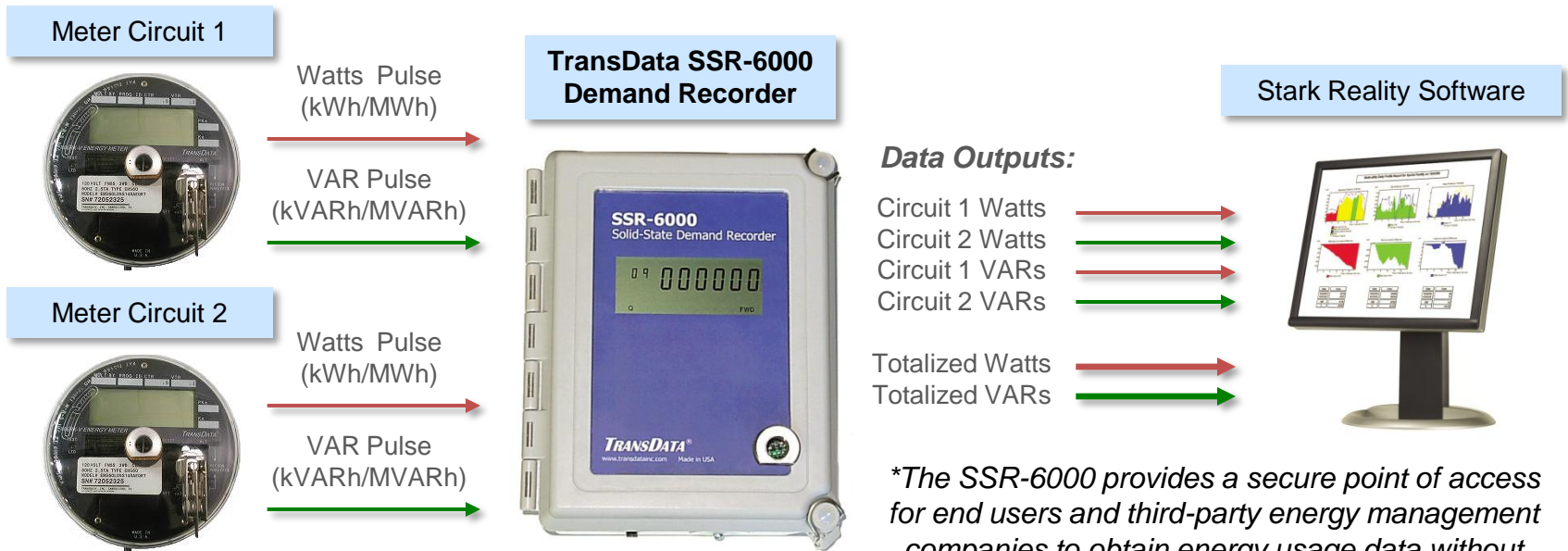


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SSR-6000 Demand Recorder

Advanced Demand Recorder and Pulse Accumulating Totalizer for Revenue Metering, AMR and Load Survey Applications



**The SSR-6000 provides a secure point of access for end users and third-party energy management companies to obtain energy usage data without directly accessing the revenue meter.*

SSR-6000 Features

- 8 Channel Load Profiling Demand Recorder
- Accepts KYZ or KY Pulse Inputs from Electric, Gas and Water Meters
- Totalizer Functionality with Scalable Pulse Inputs and Totalized Pulse Outputs
- Event Recorder System with Dial-Out Event Reporting Capability

SSR-6000 Communication Ports

- KYZ Pulse Output
- RS-232 Serial
- Telephone Modem
- Cellular
- Ethernet



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Case Study: Thomas Jefferson University Hospital Automatic meter reading reduces healthcare group's utility bills

PROBLEM

The Jefferson Health System (JHS), the largest healthcare group in Philadelphia, uses 300,000,000-kilowatt hours of electricity per year, 700 million BTUs (British Thermal Units) of natural gas, 325 million pounds of steam and 306 million gallons of water. It needed to reduce this high level of demand.

SOLUTION

JHS installed an automatic meter reading system using Stark Software which enabled them to collect, store and analyze the data in every electricity, steam and gas meter. Armed with this information, the Energy Manager and Facility Managers now know which areas they need to target to achieve reductions in energy consumption.



BENEFITS

- ✓ JHS has gained a complete picture of all its energy consumption by building and by utility.
- ✓ With a total view of all electricity demand and loads throughout the year, JHS negotiated a \$1m reduction in its annual supplier contract.
- ✓ Problems are flagged up as soon as they happen: alerts are sent whenever a piece of equipment is running out of tolerance, or whenever JHS is approaching its maximum demand level.
- ✓ Spotting billing errors, which would not have been picked up in the past, has saved around \$10,000.



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Reality is used across all kinds of market sectors:

- municipal electric utilities
- commercial
- manufacturing
- primary industry
- hospitals
- military bases
- investor owned electric utilities
- schools and colleges
- hotels and restaurants
- sport and leisure
- water treatment and supply

Reality's System Advantages:

- **Integrated:** it combines a data collection, a data management and a data reporting system into a single, unified solution.
- **Connectivity:** the software collects data directly from a leading metering and data logging products and supports a wide range of communications technologies.
- **Enterprise-wide access:** you can give your people 24/7 access to your reports and data via a Reality web server from any computer with an internet connection.
- **Scalable:** it will support anything from one meter on a single site to thousands of meters on multiple sites.
- **Multi utility reports:** you can view gas, electricity and water data in a single report and integrate this with your production and environmental data.
- **Configurability:** you can custom design your reports to deliver the information in the exact formats you require.





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The Leader of Innovative Energy Metering Solutions Since 1969...



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