

# PowerLogic® System Manager Software

## Helps You Maximize The Return On Investment (ROI) Of Your Total Electrical System

Each member of the System Manager Software V4.0 product family is full-featured as described below.



Reduce Utility Costs	Meters	Bar Charts	Tables	Real Time Trends	Diagrams	Alarms	Waveform Capture	Historical - Reports	System	Scheduled Tasks
Monitor and display instantaneous readings in engineering units	■	■	■	■	■				■	
Automatically upload onboard memory from devices to avoid data gaps										■
Collect and trend usage patterns for all electrical and piped utilities to drive accountability throughout entire organization				■					■	
Run cost allocation, consumption, trends and other reports on demand or scheduled basis use to base purchasing decisions on actual load profiles and negotiate better utility rates									■	
Avoid unnecessary peak demands and penalties through notification						■				
Optimize Equipment Utilization										
Determine equipment capacity vs. device ratings with min/max readings to maximize your equipment investments			■							
Identify where equipment is being over-stressed, and balance loads on substations, panelboards, and other power equipment, to help you extend the life of your equipment	■	■	■	■	■	■	■	■	■	■
Using waveform RMS plots and THD readings, verify if equipment performs properly when power is applied within manufacturer withstand ratings or if there is a power related anomaly causing equipment problems			■				■			
Compare facility energy efficiency and analyze loading with trend reports that include minimum, maximum, average, and standard deviation									■	
Instantly view the state of your power sources and equipment status - single line drawings, site plans, equipment summaries					■					
Improve Power System Reliability										
View thousands of device status and metered quantities for rapid indication of real time status	■	■	■	■	■					■
Get definitive conclusions with pass/fail indication for power quality parameters			■	■	■					■
Identify problems on utility supply and within facility with upstream/downstream disturbance direction indication			■	■	■					
Avoid expensive downtime and lost productivity through notification of an impending problem to browser, email, or optionally to pagers						■				
Detect power anomalies, view the sequence of events, help to pinpoint the root cause of problems, and diagnose correctable events						■				
Analyze power quality information to determine cause and effect:							■	■		
■ waveform data displays with/without digital event status plots							■	■		
■ transient waveform capture up to 100 000 points per cycle							■	■		
■ fast fourier transforms (FFT)							■	■		
■ harmonic spectral plots to 63rd and 255th harmonic							■	■		
■ 100 ms and Cycle by Cycle harmonic histogram reports							■	■		
Troubleshoot fault diagnostics, with high resolution, data including transient waveforms with up to 100 000 samples per cycle and alarm history log							■	■		

## System Manager Family Selection Guide

Software Version	DL	Standard	Pro <sup>(1)</sup>
Software part number	SMSDL	SMSSE	SMSPE
Product Features			
Devices			
System Support: PowerLogic® and Modbus/Modbus TCP compatible devices	■	■	■
Number of device connections	16 (Up to 32 with SMSDL32U)	Virtually unlimited	Virtually unlimited
System and Device Setup:			
PowerLogic® metering and monitoring device	Local	Local	Local and Remote
Data Acquisition			
Database	MSDE	MSDE (SQL Personal Edition with SMSADVRPTS)	SQL server
Data storage limit	2 Gbytes	2 Gbytes (Unlimited with SMSADVRPTS)	Unlimited
Automatic onboard file upload	■	■	■
Web-Enabled Monitoring and Control			
Pre-defined meters, tables and barchart real time displays	■	■	■
Real time trend, trending/forecasting and power quality pass/fail analysis	■	■	■
Historical trending and pre-defined reports	■	■	■
Alarm notification with disturbance direction detection	■	■	■
Waveform Capture Analysis - Transient Detection, Disturbance, FFT, RMS	■	■	■
Viewing and emailing pre-defined and user defined reports	■	■	■
Report creation and scheduling	Local	Local (Remote with SMSADVRPTS)	Local and Remote
Control outputs	Local	Local	Local and Remote
Add-On Modules		Add-On Part no.	
Extension of SMSDL to 32 device connections	SMSDL32U	Add-On	
Advanced Reports	SMSADVRPTS	Add-On	■
Extra Web Client:	WEBXTR	Add-On	Add-On
5 additional connections			
Interactive Graphics	GFXV4ENG	Add-On	Add-On
OPC Server	SMSOPC	Add-On	Add-On
Upgrade from SMSDL to SMSSE	SMSDL2SE	Add-On	
Upgrade from SMSSE to SMSPE <sup>(1)</sup>	SMSSE2PE	Add-On	
Web-Enabled			
Secure login to protect information mis-use	■	■	■
No training required browser interface - provides access to information remotely through any computer with network access	■	■	■
Full featured viewing capabilities with simultaneous browser connections	1 (Up to 6 with WEBXTR)	1 (Up to 6 with WEBXTR)	10 <sup>(2)</sup>

■ **Included**  
*Local: SMS PC using local client*  
*Remote: Allows remote connection to SMS PC through terminal services to perform client function*  
**(1)** Contact your local Schneider Electric office for availability  
**(2)** Licensed for 10 browser connections. Additional licenses can be purchased. SMSPE has been tested for 30 simultaneous browser connections.

## System requirements

The SMS software requires:

- Web browser: Microsoft Internet Explorer 5.5 Service Pack 2 or later
- Operating Systems: Microsoft Windows 2003/2000 Server/2000/XP Pro. SMSPE requires a server operating system to support remote system and device setup.

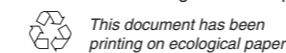
### Schneider Electric Industries SAS

89, boulevard Franklin Roosevelt  
 F - 92500 Rueil-Malmaison (France)  
 Tel: +33 (0)1 41 29 85 00

<http://www.schneider-electric.com>

PLSED105013EN

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.



Publishing: Schneider Electric SA  
 Design, production: SEDOC (38)  
 Printing:

ART: 806402 © 2005 Schneider Electric - All rights reserved

Power monitoring

## PowerLogic® System Manager™ Software Selection Guide



02-2005

### Helps You Maximize The Return On Investment (ROI) Of Your **Total** Electrical System

Each member of the System Manager Software V4.0 product family is full-featured as described below.

Meters	Bar Charts	Tables	Real Time Trends	Diagrams	Alarms	Waveform Capture	Historical - Reports	System	Scheduled Tasks
--------	------------	--------	------------------	----------	--------	------------------	----------------------	--------	-----------------

#### Reduce Utility Costs

Monitor and display instantaneous readings in engineering units	■	■	■	■	■			■	
Automatically upload onboard memory from devices to avoid data gaps									■
Collect and trend usage patterns for all electrical and piped utilities to drive accountability throughout entire organization			■				■		
Run cost allocation, consumption, trends and other reports on demand or scheduled basis use to base purchasing decisions on actual load profiles and negotiate better utility rates							■		
Avoid unnecessary peak demands and penalties through notification					■				

#### Optimize Equipment Utilization

Determine equipment capacity vs. device ratings with min/max readings to maximize your equipment investments			■						
Identify where equipment is being over-stressed, and balance loads on substations, panelboards, and other power equipment, to help you extend the life of your equipment	■	■	■	■	■	■	■	■	
Using waveform RMS plots and THD readings, verify if equipment performs properly when power is applied within manufacturer withstand ratings or if there is a power related anomaly causing equipment problems			■			■			
Compare facility energy efficiency and analyze loading with trend reports that include minimum, maximum, average, and standard deviation							■		
Instantly view the state of your power sources and equipment status - single line drawings, site plans, equipment summaries				■					

#### Improve Power System Reliability

View thousands of device status and metered quantities for rapid indication of real time status	■	■	■	■	■			■	
Get definitive conclusions with pass/fail indication for power quality parameters			■	■				■	
Identify problems on utility supply and within facility with upstream/downstream disturbance direction indication			■	■	■				
Avoid expensive downtime and lost productivity through notification of an impending problem to browser, email, or optionally to pagers					■				
Detect power anomalies, view the sequence of events, help to pinpoint the root cause of problems, and diagnose correctable events					■				
Analyze power quality information to determine cause and effect: <ul style="list-style-type: none"> <li>■ waveform data displays with/without digital event status plots</li> <li>■ transient waveform capture up to 100 000 points per cycle</li> <li>■ fast fourier transforms (FFT)</li> <li>■ harmonic spectral plots to 63rd and 255th harmonic</li> <li>■ 100 ms and Cycle by Cycle harmonic histogram reports</li> </ul>						■	■		
Troubleshoot fault diagnostics, with high resolution, data including transient waveforms with up to 100 000 samples per cycle and alarm history log						■	■		

# System Manager Family Selection Guide

Software Version	DL	Standard	Pro <sup>(1)</sup>
Software part number	SMSDL	SMSSE	SMSPE
Product Features			
Devices			
System Support: PowerLogic® and Modbus/Modbus TCP compatible devices	■	■	■
Number of device connections	16 (Up to 32 with SMSDL32U)	Virtually unlimited	Virtually unlimited
System and Device Setup: PowerLogic® metering and monitoring device	Local	Local	Local and Remote
Data Acquisition			
Database	MSDE	MSDE (SQL Personal Edition with SMSADVRPTS)	SQL server
Data storage limit	2 Gbytes	2 Gbytes (Unlimited with SMSADVRPTS)	Unlimited
Automatic onboard file upload	■	■	■
Web-Enabled Monitoring and Control			
Pre-defined meters, tables and barchart real time displays	■	■	■
Real time trend, trending/forecasting and power quality pass/fail analysis	■	■	■
Historical trending and pre-defined reports	■	■	■
Alarm notification with disturbance direction detection	■	■	■
Waveform Capture Analysis - Transient Detection, Disturbance, FFT, RMS	■	■	■
Viewing and emailing pre-defined and user defined reports	■	■	■
Report creation and scheduling	Local	Local (Remote with SMSADVRPTS)	Local and Remote
Control outputs	Local	Local	Local and Remote
Add-On Modules		Add-On Part no.	
Extension of SMSDL to 32 device connections	SMSDL32U	Add-On	
Advanced Reports	SMSADVRPTS		Add-On
Extra Web Client: 5 additional connections	WEBXTR	Add-On	Add-On
Interactive Graphics	GFXV4ENG	Add-On	Add-On
OPC Server	SMSOPC	Add-On	Add-On
Upgrade from SMSDL to SMSSE	SMSDL2SE	Add-On	
Upgrade from SMSSE to SMSPE <sup>(1)</sup>	SMSSE2PE		Add-On
Web-Enabled			
Secure login to protect information mis-use	■	■	■
No training required browser interface - provides access to information remotely through any computer with network access	■	■	■
Full featured viewing capabilities with simultaneous browser connections	1 (Up to 6 with WEBXTR)	1 (Up to 6 with WEBXTR)	10 <sup>(2)</sup>

■ Included

Local: SMS PC using local client

Remote: Allows remote connection to SMS PC through terminal services to perform client function

(1) Contact your local Schneider Electric office for availability

(2) Licensed for 10 browser connections. Additional licenses can be purchased.

SMSPE has been tested for 30 simultaneous browser connections.

## System requirements

The SMS software requires:

- Web browser: Microsoft Internet Explorer 5.5 Service Pack 2 or later
  - Operating Systems: Microsoft Windows 2003/2000 Server/2000/XP Pro.
- SMSPE requires a server operating system to support remote system and device setup.

### Schneider Electric Industries SAS

89, boulevard Franklin Roosevelt  
F - 92500 Rueil-Malmaison (France)  
Tel: +33 (0)1 41 29 85 00

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.



This document has been printing on ecological paper

Publishing: Schneider Electric SA  
Design, production: SEDOC (38)  
Printing:

<http://www.schneider-electric.com>

Power monitoring

# PowerLogic® System Manager™ Software Selection Guide

Web-enabled Power & Control  
**Transparent  
Ready™**



Merlin Gerin  
Square D

**Schneider**  
 **Electric**  
*Building a New Electric World*



# With PowerLogic® SMS, Power Monitoring Just Doesn't Get Any Easier!

PowerLogic® System Manager Software (SMS) is a full featured web-enabled product family. With built-in intuitive views, SMS insures a consistent power and utility monitoring experience.

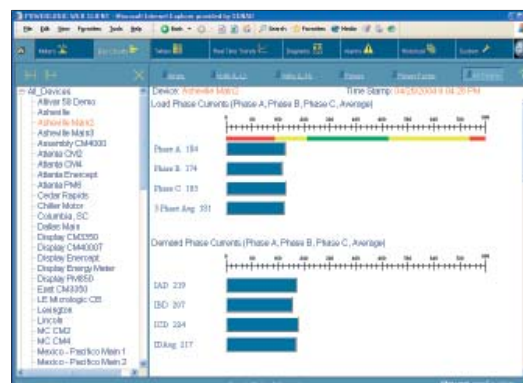
Upon installation, the system contains over 50 real time tables, analog meters and barcharts, an alarm log with waveform links, pre-engineered power quality and utility cost reports, and more. You can also tailor SMS to meet your own needs, with customized screens, trends and reports that are automatically incorporated into the tabbed navigational user interface.

## Main features and benefits

- Intuitive tabbed interface for quick system navigation
- Simultaneous remote connections from any browser-equipped computer on your network - no client software required
- Real time data and report sharing with secure access to information
- Remote alarm notification to email, pagers, and other remote devices
- Distributed monitoring and automatic data collection to eliminate nuisance data gaps
- Open system architecture with industry standard protocols and a plethora of intelligent monitoring devices
- Modular add-ons for advanced graphics, reports, billing, and customized functionality enhancements



Meters with color bands act as maintenance "grease marks" for normal range indicators allowing visual inspection to view amps, volts, power and power factor at a glance.



Barcharts with horizontal bars allow user selectable phase comparisons with color band indications.

	This Week	Last Week	30 Day Trend	This Month	Last Month	90 Week Trend
Overall	Fair	Fair	Steady	Fair	Good	Steady
Under Voltage	→Poor	→Poor	Steady	→Poor	→Poor	Steady
Over Voltage	Good	Good	Steady	Good	Good	Steady
Voltage Imbalance	Good	Good	Steady	Good	Good	Steady
Waveform Distortion	Good	Good	Steady	Good	Good	Steady
Frequency Variations	Good	Good	Steady	Good	Good	Steady
Interharmonics	Good	Good	Steady	Good	Good	Steady
Voltage Sags	Good	Good	Steady	Good	Good	Steady
Voltage Swells	Good	Good	Steady	Good	Good	Steady
Transient Overvoltages	Good	Good	Steady	Good	Good	Steady
Power	→Poor	→Poor	Steady	→Poor	→Poor	Steady

Tables provide rapid viewing for thousands of metered quantities, as well as summarized diagnostics, that give definitive conclusions about the health of the system.

Intuitive - Accessible

# Change menus quickly and easily by select

Tables



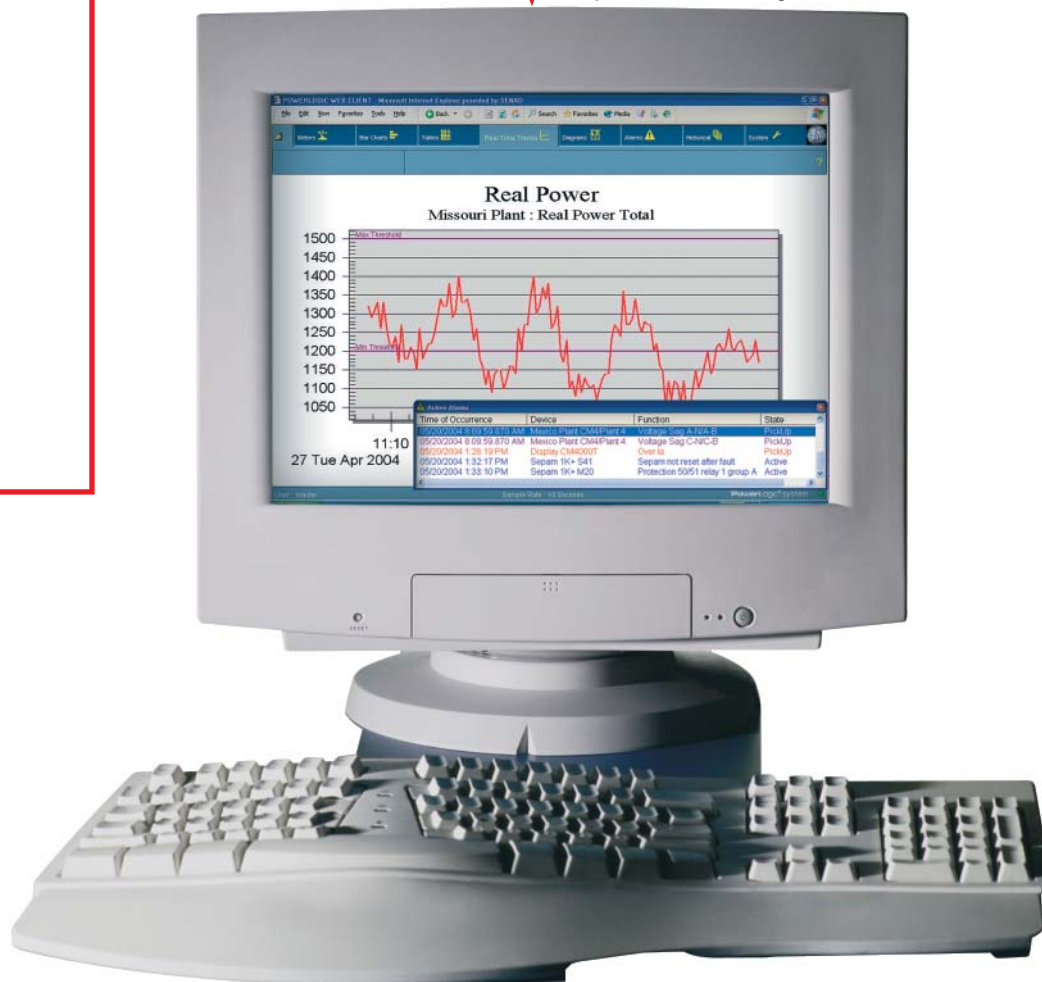
Real Time Trends



Diagrams



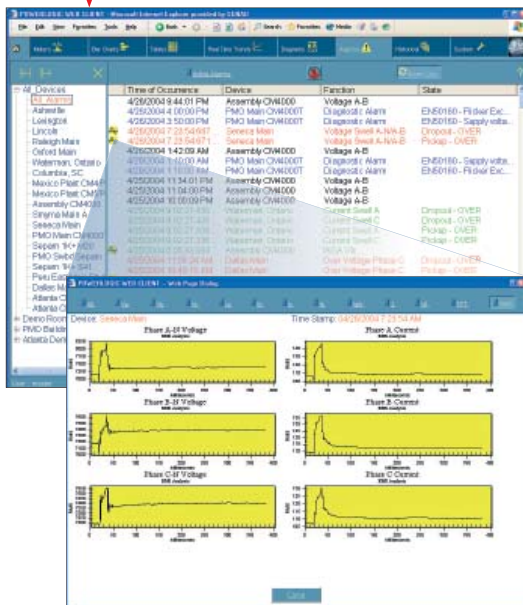
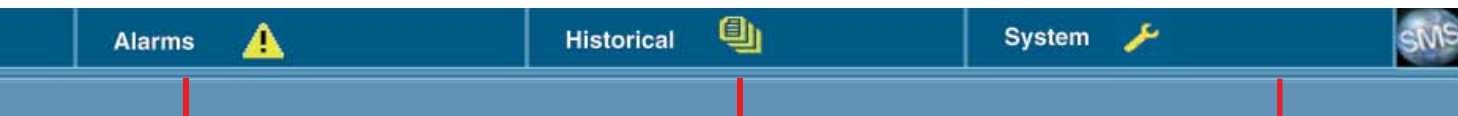
Real-time trends give instant feedback for monitoring demand, power factor or tracking 14 devices/quantity combinations. Thresholds mark acceptable min/max ranges.



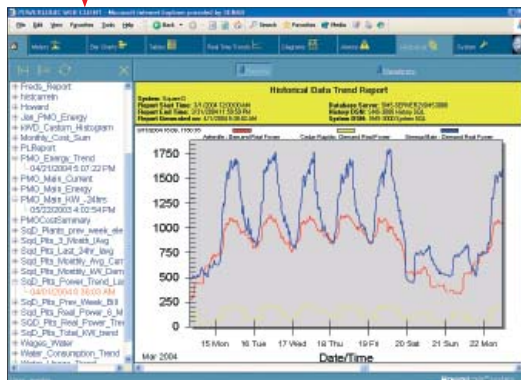
## Power Monitoring Just Doesn't Get Any Easier

- Monitoring - Web Enabled - Simple - Intuitive - Acces

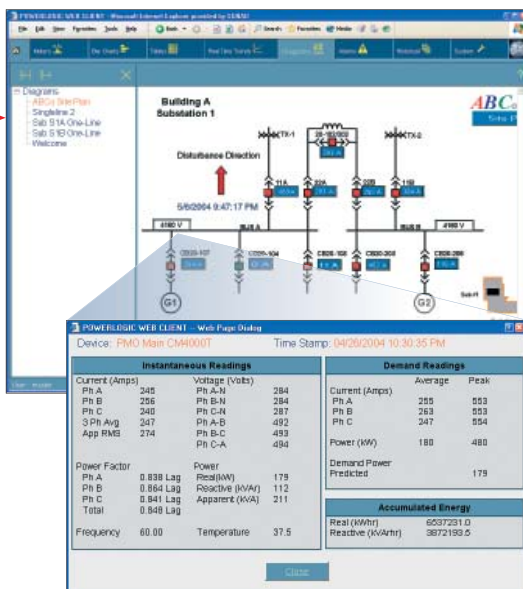
# Monitoring from tabs



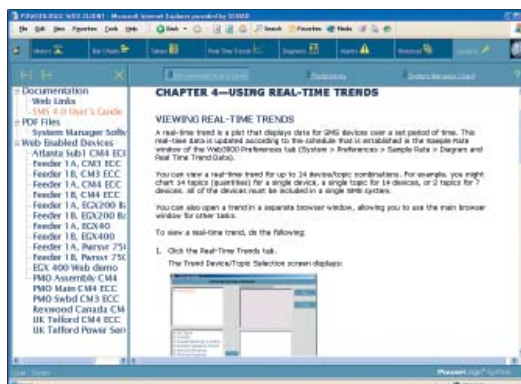
Alarms show active status and alarm history. The alarm log includes waveform analysis links to aid troubleshooting power quality system events.



Historical information includes system wide viewing of collected data in the form of reports, trends and waveform analysis.



Diagrams graphically mimic your system and can provide real time fault diagnostics indicating whether the direction of the last disturbance was upstream or downstream of the monitoring point.



The System tab includes viewing of any document link in the form of spreadsheets, PDF files, MPG videos, HTML pages, etc., that are ideal for viewing maintenance manuals, video procedures or directly accessing embedded web page readings from Circuit Monitors and Ethernet gateways.