

expertpower™

ENERGY MANAGEMENT SOLUTION



About ExpertPower

ExpertPower™ software solution provides comprehensive energy management, billing, demand response, power quality analysis, demand side management and generator control. ExpertPower™ is available either as an online service (SaaS – Software as a Service) or as a standalone software package. ExpertPower™ is a true enterprise platform. It is built with a commitment for flexible and standardized architecture. The cross-browser support and customizable user interface engine;

the full API (Application Programming Interface) and adaptable 3rd party devices modules; or the two-way configurable AMR (Automatic Meter Reading) communication solution—all were designed to support and serve as a business enterprise solution. By supplying both the infrastructure and the fundamental power management applications, ExpertPower™ sets a new standard in the energy industry.

Main Modules
Energy Management



- Compare energy consumption in different locations
- Analyze differences
- Cost calculation
 - Compare with different price lists
- Consumption types
 - Import, Export
 - TOU (Time Of Use)
- Consumption sources
 - Electricity
 - Water
 - Gas
 - Photovoltaic
 - Fuel
 - Wind

Billing and Sub-Metering

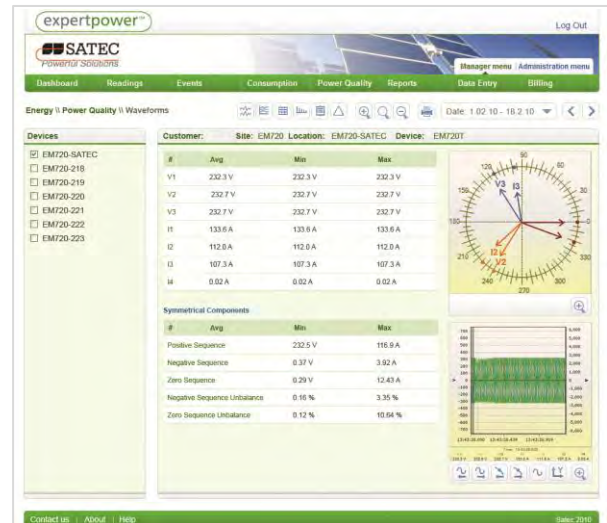
Description		Usage code	Season	Tariff	Previous Date	Previous Reading	Present Date	Present Reading	Usage	Cost per kWh	Total Cost
TOU energy		077	Summer	Peak	12/7/2011	60,330	12/13/2011	61,502	1,166	1.01	1,176.38
TOU energy		078	Summer	High	12/7/2011	49,317	12/13/2011	52,346	3,120	0.43	1,346.59
TOU energy		079	Summer	Low	12/7/2011	45,003	12/13/2011	47,552	2,549	0.28	710.92
TOU energy		177	Winter	Peak	12/1/2011	59,352	12/7/2011	60,330	978	0.91	892.43
TOU energy		178	Winter	High	12/1/2011	47,516	12/7/2011	49,317	1,801	0.53	960.99
TOU energy		179	Winter	Low	12/1/2011	43,963	12/7/2011	45,003	1,040	0.31	317.30
TOU energy		777	Fall/Spring	Peak	10/31/2011	48,144	12/1/2011	59,352	11,119	0.42	4,663.31
TOU energy		778	Fall/Spring	High	10/31/2011	41,241	12/1/2011	47,516	6,275	0.34	2,137.89
TOU energy		779	Fall/Spring	Low	10/31/2011	36,498	12/1/2011	43,963	7,465	0.27	2,014.06
Subtotal									35,513		14,221.87
PF									0		
Total Charge									0		14,221.87

- Dynamic tariff definition—define a complete set of billing structures:
 - Price Types
 - Usage Types
 - Seasons
 - Price Lists
- Accurate cost calculation
- Complete Sub-Metering solution
 - Tenants management
 - Flexible invoicing options
 - Compare invoices
- Easy-to-go manual calculator
- Dynamic billing reports definitions
 - Select invoice columns
 - Aggregation options
 - Multiple formats

Demand Response

- Automatic/Manual generator control
 - Operate generators based on incentives, time periods, availability
 - Interface to utility load profiles
 - Complete energy and cost calculations and reports
- Power stations load management
 - Track energy production and consumption for providers and consumers
 - Automated load profiles updates
 - Consolidate accurate billing for energy production and usage. Based also on out-of-plan usage and production

Power Quality



- Compliance reports
 - EN50160, IEEE1159 and GOST 13109 standards.
- Event summary
 - Get accurate summary for each event.
- Harmonics
- Waveforms
 - Advanced waveforms display that enables detailed analysis.
- Phasor display

Enterprise Tools

- State-of-the-art user interface
 - Cross-browser support (Internet Explorer, Firefox, Chrome, Opera, Safari)
 - Personalized dashboards
- Events and Alarms
 - Multi-level criteria and thresholds
- Remote device configuration and control
- Connect to any Modbus-compatible 3rd party devices
- Integration with 3rd party enterprise applications (BMS, SCADA, ERP, CRM)
- Built-in data export to different formats (Excel, PDF etc.)
- Flexible access permission per user, per group

ExpertPower™ Handheld Remote Monitor

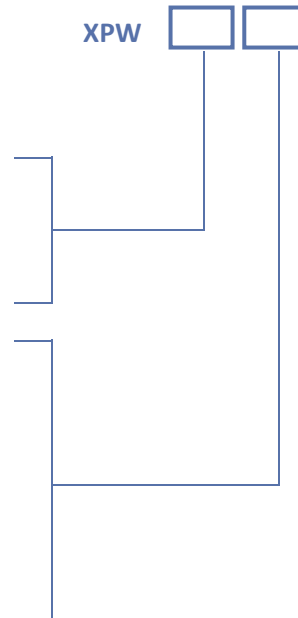


Technical Notes

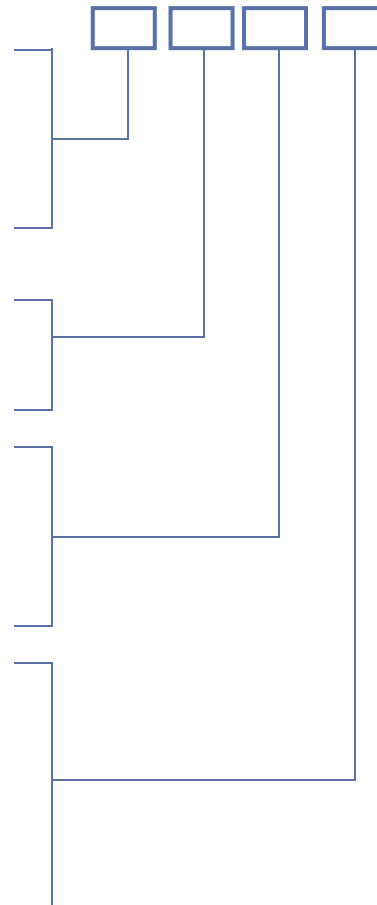
Operating System	Windows XP, Vista, 7, 2003/2008 server. Either 32 or 64 bit
Database	MSSQL Server 2008. Support also Express edition.
Framework	.Net Framework 3.5
Web Server	IIS 5 and higher
Browsers	IE 7 and higher, Firefox, Chrome, Opera, Safari
Num. of Devices	Unlimited based on server specification

Order String

ExpertPower™ Service	XPW
One time setup fee for new site (new or existing customer)	
OPTIONS	
Installation and Configuration – on time charge	
Customized graphic page without data	GRA
Single Line Diagram, up to 8 devices, 3 param./device	SLD
Complex graphic pages, more devices etc.	(contact factory)
New utility tariff	TAR
Monthly Charges per Device	
Basic data (at a frequency every 6 minutes or more)	BM
Power Quality and Faults (add-on for basic measurement)	PQ
Frequent readings (2 min<every <6 minutes, for basic data)	FR
Virtual Device (Basic data only)	VD
GPRS data collection (not including cost to cellular and data collection providers)	GP
Billing service - per bill per month in PDF format	BIL
Support for remote operation of generators	GEN



ExpertPower™ Pro Edition	XPP
ExpertPower™ Pro Edition Stand alone. Includes license for one logical site, once computer and 10 users.	XPP
Web Services API Web Services support to communicate to SCADA or other software	WEBS
LICENSING (order qty)	
Licensing per communicating device	
License for single PM130 PLUS or EM133	LIL
License for single PM172 or 3rd party device	LIM
License for single BFM136 or device with power quality	LIH
Licensing for billing	
Billing for ExpertPower Pro Edition, allows issuing invoices, manage customer charges and more. The price includes 12 bills per billing period (PB)	BIL
Additional Periodical Bill (above the first 12) - allows issuing one bill per billing period. A bill is required for each load (e.g. 12 bills for full 3 phase BFM), water and gas bills	PB
Licensing per connection/user	
License for one concurrent remote web interface connection and 10 users. For example, XPP plus 2 LIUs allow: → Installation of ExpertPower™ on server with local or remote SQL database (database licensing may be required) → Use ExpertPower™ using Internet browser on the server → Configuring up to 30 users → Using the ExpertPower™ with Internet browser on as many computers as required, maximum 2 active at the same time	LIU



Note: ExpertPower™ requires MS SQL. Customers may use any version including the free SQL Express. The MS-SQL should be purchased separately.