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

→ 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
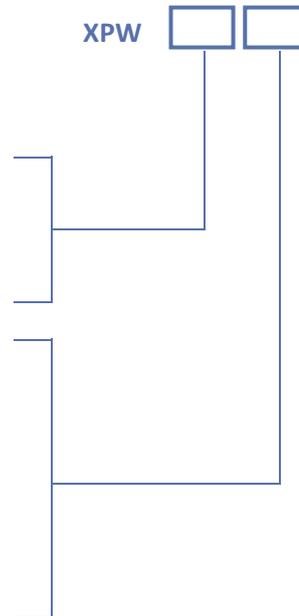
ExpertPower™ Handheld Remote Monitor

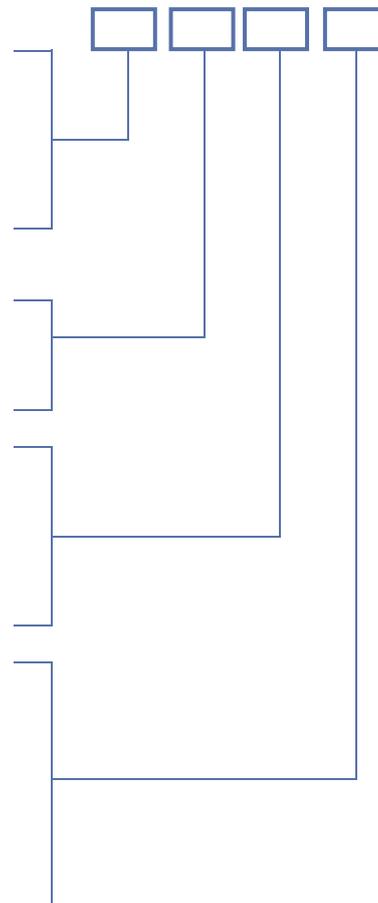# Technical Notes

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	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		☐ ☐ ☐ ☐
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.