

# MV-90 xi

## specifications

### **MV-90 xi Software System**

*Interval Data Collection, Analysis and Application – all in one system*

#### **Overview**

Itron's MV-90 xi software is the industry's leading system for collecting and processing interval data from complex metering devices. In fact, it is the industry's only true multi-vendor solution. In addition to its unparalleled data collection capabilities, MV-90 xi provides powerful tools for analysing and applying that data for use by other applications and decision-makers within your company.

With MV-90 xi, utilities can reduce the cost of data collection operations, guarantee that processes are consistent and ensure data integrity.

#### **MV-90 benefits**

- > Reduced O&M costs and increased productivity by running a single system for interval data collection and management;
- > Improved revenue as a result of improved integrity of the interval data used for billing purposes; and
- > Operational flexibility due to a scalable solution that can grow with your needs.





### **MV-90 xi: a proven solution**

MV-90 xi is a tried-and-tested solution for interval data collection and analysis requirements. The system can be run as a collection engine for utilities with existing data management and analysis features, or as a complete, end-to-end interval data management solution. The architecture used by MV-90 xi provides a stable, fully-scalable solution, with full 32-bit Windows applications, a high-performance database, and a powerful task manager for holistic system operation. Translation interface modules complete the system and are used for all meter readings. This architecture guarantees scalability, efficient data storage and retrieval, and unmatched multi-vendor data retrieval capabilities.

With MV-90 xi utilities have a powerful tool for processing and using interval data more effectively and efficiently.

### **MV-90 xi features**

- > The ability to collect data from over 150 metering devices;
- > Support for a variety of communications including PSTN, Cellular, RF, HHF file import, Itron's C&I Network, TCP/IP;
- > Support for a range of communication configurations including inbound and outbound calls, daisy chaining and master/slave configurations;
- > Industry best-practice techniques for data validation, editing and estimation;
- > Powerful analysis tools including graphs and reports, data aggregations, time of use, loss calculations, billing determinant calculations; and
- > Flexible data export features, such as spreadsheet and ODBC file formats.

### **Gas applications**

MV-90's proven track record as a robust interval data collection system also applies to collecting, validating, and reporting for gas metering. MV-90 xi can be used to retrieve data from most electronic volume correctors and load profile recorders used for gas metering. The MV-90 xi platform provides a new, optional software module designed specifically to support LDCs with key gas metering and reporting business processes such as revenue billing, gas transportation requirements for nominations and balancing, settlement, load research and automated meter event notification.

### **System features**

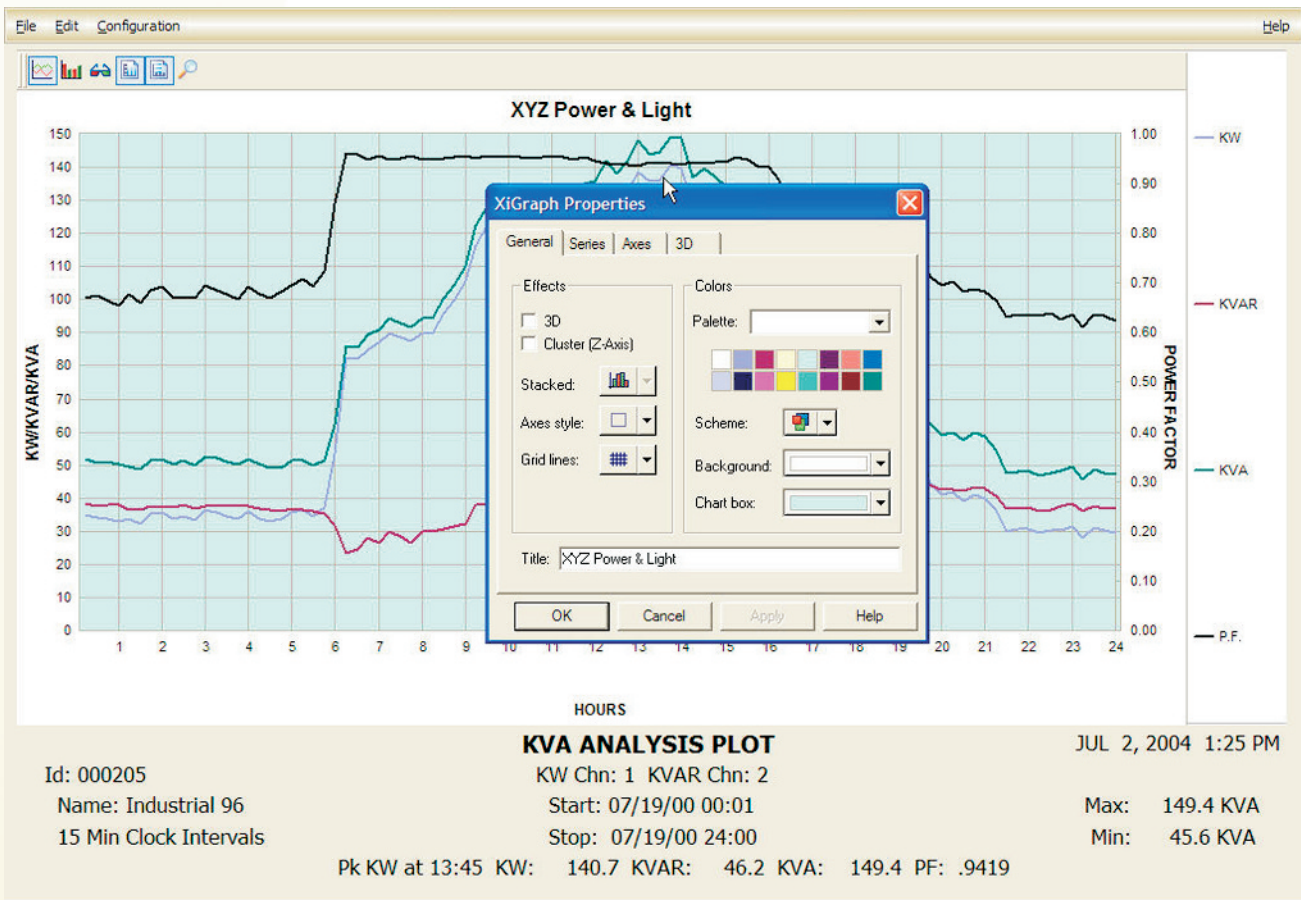
- > Validation
- > Estimating and editing data
- > Aggregation and totalling
- > Multi-threaded communications
- > Multi-threaded data processing
- > Time of use
- > Exports
- > Reports and graphs

### **Scale your system as operations grow**

MV-90 xi is a fully-scalable solution. The system can be licensed as a network or single PC solution. No matter which license you have, the architecture ensures the system can grow to match your business operations. In a network setting, greater processing power is achieved by simply adding additional workstations. MV-90 xi's centralised task management system distributes the processing load among workstations to create a truly distributed processing environment with no loss of performance.

### **MV-90 xi core functions**

- > Remote Interrogation is used to dial up and retrieve interval, register and event data from recorders/meters via phone lines or other means of communication.
- > Validation is used to confirm the quality of data read from the meter, using a range of criteria that users can define. You can define general, channel and interval-based validations as well as validation comparisons with previous time periods.
- > Editing and estimation is used to make adjustments to data that has failed validation. Data can be added, deleted, replaced, restored, adjusted, or changed by a multiplier. Estimation techniques include plug, copy, redundant/check meter, and linear interpolation.
- > Direct upload of Handheld Readers is used to upload data directly from the handheld reader via a direct connection using an RS232 cable or via a modem to a remote cradle.



- > Totalling is used to aggregate interval load data from any number of metering points into summary files. All reports and graphics can be produced on summary files as well as pulse files.
- > Time Of Use (TOU) supports user-defined rate schedules which can then be applied to interval-load data for implementing TOU rates and for billing.
- > Reports include the Translation Summary Report, Interval Pulse Data Report, Interval Load Data Report, KVA Analysis Report, and Peaks Report. Users can define when these reports are to be produced; at a specific time, or at on-going intervals rounded up to the nearest 60 minutes.
- > Graphics are used to plot interval or summary load data for Daily Load Curves, Typical Days Analysis Curves, Load Duration Plots, Daily Summary Plots, and Monthly Summary Plots.
- > Spreadsheet File Format is used to create interval or summary files that can be exported to an ASCII Spreadsheet file.
- > File/Data Transfer is used to export interval load data to other systems in the format specified for importing data from those systems.
- > xiCOMM is a data retrieval option for network operations which allows multiple meter readings to be handled simultaneously on the same workstation. This capability is designed for systems that require large-scale meter reading. xiCOMM supports multiple connection types on the same workstation, allowing one workstation to handle outgoing and incoming phone calls using a multi-port serial board.



**Customize DataBases**

Menu	Toolbar	Item Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Master File
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maintenance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	[ ]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	List Master File
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Export Master File
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Account Reroute
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Data Directory
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maintenance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Recover
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Summary Mapping
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TOU Schedules
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Meter Readings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remote PC/Reader File
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Supplemental Master File
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Demographics Database
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Demand Consumption History
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Power Billing System
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pool Master File
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pool Worker Maintenance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Database Utilities

Task ID	Time Due	On Bill Cycle
000204	13:22 07/02/2004 13:22	No
000205	13:22 07/02/2004 13:22	No
000206	13:22 07/02/2004 13:22	No
000207	13:22 07/02/2004 13:22	No
000208	13:22 07/02/2004 13:22	No
000209	13:22 07/02/2004 13:22	No
000200	10:50 07/05/2004 10:49	No
000201	10:50 07/05/2004 10:49	No
000202	10:50 07/05/2004 10:49	No
000202	10:50 07/05/2004 10:49	No
000203	10:50 07/05/2004 10:49	No
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000206	10:50 07/05/2004 10:49	No
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000200	13:23 07/05/2004 13:22	No
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000205	13:23 07/05/2004 13:22	No
000206	13:23 07/05/2004 13:22	No
000207	13:23 07/05/2004 13:22	No
000208	13:23 07/05/2004 13:22	No
000209	13:23 07/05/2004 13:22	No
000209	13:23 07/05/2004 13:22	No

	Pending	Running	Hold	Failed	Total
WorkStation	30	0	0	0	30
System	30	0	0	0	30

Task List - Last updated at 07/02/04 1:24:31 PM (System-wide Tasks)

### Additional packages

- > ODBC Interface extracts data from MV-90 xi data files and outputs it into any Open Database Connectivity (ODBC)-compliant database system. Once the ODBC data source is set up, MV-90 xi can be used to export specific recorder IDs and (optionally) meter start and stop dates. After the meter data has been exported to the ODBC schema, customers can access this data by using standard commercial SQL database tools.
- > The Billing Determinants Package is used to calculate billing values (Demand, Energy, Power Factor, Load Factor, Peak Demand, etc.). The data is formatted for the customers' billing requirements and a file created for export to the billing system. The Billing Determinants file is in ASCII format which makes it easy to interpret, parse or load into other programs or database tables.
- > EDI Package is used to import and export files to and from MV-90 xi in EDI file format.
- > Event Notification is an add-on package used to enable near real-time communication of meter events once they have entered the system. Rules can be set up in the event notification package which enable MV-90 xi to trigger notifications via email or cell phone of key events recorded by the meter.
- > TCP/IP Module allows MV-90 xi to communicate with meters over a network connection, rather than using a dial up modem. This network connection can be a LAN, WAN, or public wireless network.

## profile

### **Itron**

Itron is a leading technology provider and critical source of knowledge to the global energy and water industries. More than 3,000 utilities worldwide rely on Itron technology to deliver the knowledge they require to optimise the delivery and use of energy and water. Itron delivers value to its clients by providing industry-leading solutions for electricity metering; meter data collection; energy information management; demand response; load forecasting, analysis and consulting services; distribution system design and optimisation; web-based workforce automation; and enterprise and residential energy management.

***For more information, go to: [www.itron.com/global](http://www.itron.com/global)***



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