

Power Management University

2010 Course Catalog



Make the most of your energySM



What does Power Management University offer?

Square D® PowerLogic® Power Management University offers a variety of training courses designed to teach how to utilize Square D PowerLogic metering, monitoring, communication, software and protection products. Our full-time instructors are committed to training attendees to get the most efficient use out of a power management system.

Who should attend?

> End Users

Engineers, maintenance technicians, electricians, operators, facilities managers and others involved in managing a facility's electrical power consumption and power system reliability will find that our curriculum is specifically designed to teach the end user and the installer where to locate metering devices, and how to collect and extract data using PowerLogic software. The end result is the ability to effectively manage the cost, quality and reliability of your electric power.

> Contractors and Consultants

Our curriculum gives contractors and consultants in-depth understanding of the PowerLogic system and, in turn, allows you to better serve your customers with the expertise to specify, install and configure our power management solutions correctly.

> Energy Managers and Facilities Managers

Managers, who have the financial and overall responsibility for one or multiple facilities, need education in order to make the best purchasing decisions for new or retrofit expansions that include energy and power management. Understanding the full capabilities and benefits of implementing a PowerLogic power monitoring solution can help you better direct and maximize your savings potential.

> Extensive Hands-on Experience

All classroom and regional courses provide individual lab stations consisting of monitoring devices, communication hardware and power monitoring software. Each student will create his own power monitoring system and spend 80% of the time with hands-on activities to develop the skills to successfully use and maintain their energy and power management system.



What attendees say about our PowerLogic trainers:



“Prepared. Enthusiastic. Knowledgeable. Able to answer questions.”

“One of the best instructors ...throughout my 18-year engineering/management career...hands on and practical application of the product to real-world situation, made it easy to grasp the subject matter.”

I never once got bored or lost interest...teaching style fosters a learning environment, while keeping the subject fun and interesting.”



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Training Options for the Customer

Factory Training

We have two training centers, one located in Nashville, TN and one in Victoria, British Columbia. Each of these locations offer a variety of courses for students to take to teach them how to utilize PowerLogic power monitoring products. Each course is designed with 80% hands-on lab exercises to maximize proficiency.

In addition to the training, customers will be at facility where the products are designed, developed and supported. So there is invaluable face-time with people who can make a difference for you.



Go to the **Factory Training Section** of this catalog to view the courses offered at the factory.

Regional Training

In an attempt to minimize travel expenses on our customers, we offer training at a number of our field offices throughout the country. Check our website to find where and when a training class is coming to you.



Go to the **Regional Training Section** of this catalog to view the course list offered regionally.

PMU Customized, On-site Training

PMU custom training is the best way to ensure your technical personnel have the skills and knowledge they need to implement, operate and maintain the power monitoring system that supports your business.

PMU custom training consultants will tailor a plan that specifically addresses your learning and system needs and can be provided at any skill level. On-site training is most valued when your facility has multiple people requiring training or very specific training needs.

Prices are based upon number of training days, number of people being trained, and whether or not we need to ship training equipment to your site.



Call us today for a quote.

PMU On-demand Training

Today's economic times have presented companies with shrinking budgets, rising travel costs and limited manpower. PMU on-demand training offers solution content in a convenient and affordable online environment that allows our customers to get the valuable training where and when they need it.

- **Value** – With a variety of content topics, PMU on-demand training delivers high-quality training at a low cost.
- **Convenience** – PMU has a track record for providing first-rate customer training. Now we are making that training available anytime, from any location.
- **Quality** – PMU on-demand training offers a rich and interactive learning environment that includes expert instruction, video demonstrations, quizzes, simulations and hands-on demonstrations.

Those customers who may benefit from this training option are the students who have already attended one of our instructor-led classes and needs a topic specific training option that is quick and accessible from anywhere.



Visit www.powerlogic.com/training to access our on-demand campus.

PMU Online Webinar Training

- **Benefits** – Online training offers remote students all the benefits of a classroom experience without the costs of travel.
- **Live instructors** – Each class is directed by a live instructor.
- **Refresher training** – Online training is broken down into specific topics so that students can take specific webinars for refreshing the skills in certain areas.
- **Real-time interaction** – Raise your hand to ask questions, chat with instructors or other panel members and answer poll questions.
- **Labs and exercises** – Students get to use virtual servers and images to perform the labs and exercises, just like a real class. Maximize retention through our hands-on training.
- **Reduced cost** – Because we do not have to ship equipment or incur the expenses of travel we can lower the cost of the class and pass the savings over to you.



Go to the **Webinar Training Section** of this catalog to view the course list offered via webinar.

Factory Training

ION Software Solutions



PowerLogic ION Enterprise Fundamentals

Course number: 3000PMUFUND

Overview (four days)

This four-day introductory course focuses on how to use an ION Enterprise system effectively. After examining the key features of an ION Enterprise system, students will use the software interfaces to monitor, control, analyze and report on their electrical system. Students will configure real-time alarms and view historical events, logged data and plot historical trends. Then students will enable sag/swell detection and plot power quality data and waveforms. For the second half of the course, students will configure ION meters and incorporate them into their ION Enterprise system. This course provides a comprehensive overview of the capabilities of an ION Enterprise system and the practical skills to use it successfully.

Who should attend

Anyone who will be using or is already using PowerLogic ION Enterprise® software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Explain the key features of a PowerLogic ION Enterprise system
- Conduct real-time monitoring using *Vista* and *WebReach*
- Analyze historical loads and consumption using *Vista* and *WebReach*
- Analyze power quality and waveform data using *Vista* and *WebReach*
- Create and manage reports using *Web Reporter*
- Determine the capabilities of specific PowerLogic meters
- Use meter front panels
- Configure new meters using *ION Setup* software
- Add new meters to a PowerLogic ION Enterprise system
- Describe how ION meters calculate demand, peak demand and energy
- Examine the basic configuration of ION meters using *Designer*
- Enhance *Vista* diagrams to show information for newly-installed meters

ION Enterprise Administrator

Course number: 3000PMUADMIN

Overview (four days)

This course focuses on topics for ION Enterprise system administrators. In a training lab environment, students will install ION Enterprise software and commission an ION Enterprise primary server. After adding ION devices to the system, students will verify communications and critical functions and configure the system according to a set of specifications. The course also covers ION Enterprise folder and file structure, security considerations, user access, database management, and system maintenance, backup and disaster recovery.

Who should attend

This course is designed for anyone who is responsible for maintaining and supporting an ION Enterprise system, such as system administrators, advanced ION Enterprise users and partners of Schneider Electric who have taken the ION Fundamentals training course sometime in the past.

Prerequisites

- A reasonable understanding of Microsoft® Windows operating systems
- It is beneficial to have basic working knowledge of a real ION Enterprise system

Students will be able to

- Commission an ION Enterprise primary server
- Add ION meters to an ION Enterprise system
- Assess the communications to ION devices in an ION Enterprise system
- Confirm data logging from ION meters into the *ION_Data* database
- Verify the clock settings of ION meters and time synchronization
- Configure the ION Enterprise system to meet specific requirements
- Commission an ION Enterprise client workstation
- Assess the components of an ION Enterprise system
- Assess the security of the ION Enterprise system
- Establish a maintenance and backup plan for an ION Enterprise system
- Practice a disaster recovery for an ION Enterprise system

ION Enterprise Programmer

Course number: 3000PMUPROG

Overview (four days)

This advanced course focuses on meter level and system level customization using the *Designer* interface in ION Enterprise software. Students will be guided through a series of lab activities to practice modifying the default ION meter programs (frameworks) as well as creating custom applications for equipment monitoring, alarming and logging. Students will learn to program the *Virtual ION Processor (VIP)* for special applications such as data aggregation and event driven reporting. Students will then have the opportunity to design and build their own custom applications, such as reading registers from downstream Modbus slave devices or enabling the ION OPC server capabilities. Students are encouraged to bring application examples and programming ideas to the course.

Who should attend

This course is designed for anyone who works with an ION Enterprise system and has reasonable knowledge of the default functions of ION meters and ION Enterprise software. This course may be appropriate for meter/instrumentation technicians, system engineers and system integrators who need to learn how to get the most out of their ION Enterprise system.

Prerequisites

- Working knowledge of ION Enterprise software, especially experience using *Vista*
- Working knowledge of the default capabilities of ION meters
- General computer skills and basic working experience with Microsoft Windows
- Completion of an ION Enterprise Fundamentals or Overview course is recommended

Students will be able to

- Describe ION architecture and ION module properties
- Examine configuration of meters installed in an ION Enterprise system
- Modify the default frameworks of ION meters using *Designer*
- Construct programs to monitor and alarm for current
- Create a program to monitor equipment and capture high-speed data
- Create a program that sends e-mail alert messages
- Create system-level programs in the *Virtual ION Processor (VIP)*
- Design and build your own custom applications

Factory training: ION software solutions (cont.)



ION Meter Programmer for Utility Meter Shop Technicians

Course number: 3000PMUMTRPRG

Overview (two days)

This two-day course focuses on how to setup and program ION revenue meters using the front panel and ION Setup software. After reviewing the displays and setup menus available via the meter front panel, students will configure ION meters for revenue metering, advanced security, communications, energy pulsing, logging and power quality monitoring. All of the key features of ION Setup software will be emphasized, including the *Setup Assistant*, *Offline meter programming*, *Network Mode*, *Advanced Module View* and *Data Viewing Mode*. Topics such as meter template and firmware management, time synchronization and meter configuration reports will be covered. Students will also explore the advanced features of ION Setup to add and change ION modules for customized functions. The last part of the course concentrates on using ION Setup software as a meter troubleshooting tool.

Who should attend

Anyone who will be configuring, customizing and troubleshooting ION meters extensively using ION Setup software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Use the front panel of an ION meter
- Use ION Setup software to configure ION meters
- Use ION Setup software to assess meter wiring
- Use ION Setup software to manage ION meter programs
- Use ION Setup in *Network Mode* to connect to multiple meters
- Use ION Setup in *Data Viewing Mode* to view meter values remotely
- Describe ION architecture and ION module properties
- Use ION Setup in *Advanced Module View* to create additional functionality

Regional Training

ION Software Solutions

ION Enterprise Overview

Course number: 3000PMUCION

Overview (three days)

This three-day introductory course focuses on how to use an ION Enterprise system. After reviewing the key features of ION Enterprise systems, students will practice using meter front panels and ION Setup software to verify the configuration of devices that already exist in the system. In a hands-on lab environment, students will use the software interfaces to monitor and report on their electrical system. Lab activities include viewing historical events and waveforms. This course provides a basic overview of the capabilities of an ION Enterprise system and the practical skills to begin using it more efficiently.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Explain key features of ION Enterprise systems
- Verify the configuration of meters in an ION Enterprise system
- Conduct real-time monitoring in *Vista*
- Manage events and alarms in *Vista*
- Analyze load and power quality data in *Vista*
- Generate basic reports with Reporter

ION Enterprise Administrator Overview

Course number: 3000PMUCADMIN

Overview (two days)

This two-day course focuses on topics for ION Enterprise system administrators. In a training lab environment, students will add PowerLogic devices to a newly-installed ION Enterprise system. Students will then verify communications and critical functions. The course also covers ION Enterprise folder and file structure, security considerations, user access, database management, and system maintenance and backup.

Who should attend

This course is designed for anyone who is responsible for maintaining and supporting an ION Enterprise system, such as system administrators, advanced ION Enterprise users and partners of Schneider Electric who have taken the ION Fundamentals training course sometime in the past.

Prerequisites

- A reasonable understanding of Microsoft Windows operating systems
- It is beneficial to have basic working knowledge of a real ION Enterprise system

Students will be able to

- Add ION meters to a newly-installed ION Enterprise system
- Assess the communications to ION devices in an ION Enterprise system
- Confirm data logging from ION meters into the *ION_Data* database
- Verify the clock settings of ION meters and time synchronization
- Assess the components of an ION Enterprise system
- Assess the security of the ION Enterprise system
- Establish a maintenance and backup plan for an ION Enterprise system

Regional training: ION software solutions (cont.)

Introduction to ION Designer

Course number: 3000PMUCPROG

Overview (two days)

This intense two-day course focuses on how to examine and program ION devices that belong to an ION Enterprise system. The course starts with an examination of the ION meters that are already added to an ION Enterprise system using *Designer*. Critical meter settings will be verified and documented. Students will then use *Designer* to create custom applications in the ION devices. Lab activities include constructing a monitoring program for over current/demand as well as building an application for capturing high speed motor in-rush current data. This course provides a basic overview of ION programming concepts and the practical skills to begin programming ION devices more effectively as part of an ION Enterprise power monitoring system.

Who should attend

This course is designed for anyone who works with an ION Enterprise system and has reasonable knowledge of the default functions of ION meters and ION Enterprise software. This course may be appropriate for meter/instrumentation technicians, system engineers and system integrators who need to learn how to effectively utilize their ION Enterprise system.

Prerequisites

- Working knowledge of ION Enterprise software, especially experience using *Vista*
- Working knowledge of the default capabilities of ION meters
- General computer skills and basic working experience with Microsoft Windows
- Completion of an ION Enterprise Fundamentals or Overview course is recommended

Students will be able to

- Describe ION architecture and ION module properties
- Examine configuration of meters installed in an ION Enterprise system
- Modify default ION meter programs (frameworks)
- Construct programs to monitor and alarm for current
- Create a program to monitor equipment and capture high speed data

ION Meter Programmer for Utility Meter Shop Technicians

Course number: 3000PMUMTRPRG

Overview (two days)

This two-day course focuses on how to setup and program ION revenue meters using the front panel and ION Setup software. After reviewing the displays and setup menus available via the meter front panel, students will configure ION meters for revenue metering, advanced security, communications, energy pulsing, logging and power quality monitoring. All of the key features of ION Setup software will be emphasized, including the *Setup Assistant*, Offline meter programming, *Network Mode*, *Advanced Module View* and *Data Viewing Mode*. Topics such as meter template and firmware management, time synchronization and meter configuration reports will be covered. Students will also explore the advanced features of ION Setup to add and change ION modules for customized functions. The last part of the course concentrates on using ION Setup software as a meter troubleshooting tool.

Who should attend

Anyone who will be configuring, customizing and troubleshooting ION meters extensively using ION Setup software.

Prerequisites

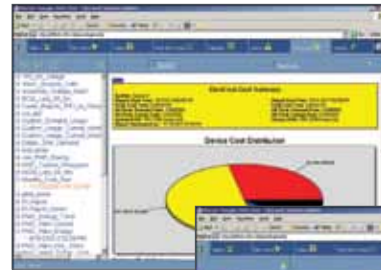
- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Use the front panel of an ION meter
- Use ION Setup software to configure ION meters
- Use ION Setup software to assess meter wiring
- Use ION Setup software to manage ION meter programs
- Use ION Setup in *Network Mode* to connect to multiple meters
- Use ION Setup in *Data Viewing Mode* to view meter values remotely
- Describe ION architecture and ION module properties
- Use ION Setup in *Advanced Module View* to create additional functionality

Factory Training

SMS Software Solutions



SMS Fundamentals*

Course number: 3000PLUC200

Overview (four days)

This intensive four-day course is designed to familiarize the user with skills and techniques to maximize the effectiveness of PowerLogic System Manager™ software.

Who should attend

Technicians, operators and administrators looking to reduce utility cost, optimize equipment utilization and improve productivity using PowerLogic metering devices and software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Define the benefits of using a power monitoring system for energy management and power quality
- Identify the different ways to view real-time and historical data from your system
- Define and understand the different configurations of SMS
- Choose and identify between the different PowerLogic power monitoring devices
- Configure and communicate with PowerLogic devices using the different communication mediums and devices
- Navigate and utilize SMS Setup Utility to check on an existing system or configure a new system
- Differentiate between onboard and PC-based logging and configure upload tasks to collect historical data directly into the database
- Differentiate between and configure both onboard and PC-based alarming as well as digital and analog alarms
- Differentiate, capture, upload and view the different types of waveforms available in the PowerLogic power monitoring system
- Utilize, extract, and view data using Information Manager, Advanced Reports, GFX and the SMS web client

Note:

This Course can be bundled with the SMS Refresher CD

* Bundled Class Number: 3000PLUC205

Factory training: SMS software solutions (cont.)

PowerLogic System Installation and Troubleshooting

Course number: 3000PLUC100

Overview (four days)

This introductory course focuses on how to install and set up PowerLogic metering and communication devices and how to create and manage a system in the PowerLogic System Manager software (SMS) application. Identifying and resolving meter setup issues, CT and PT wiring issues, and meter communication network issues are emphasized. Students will examine the key features of a PowerLogic power monitoring system, examine the capabilities of specific PowerLogic meter series and learn how to select the correct meter for different metering points in a typical facility. The features of the PowerLogic Ethernet communication gateways will also be examined. Students will configure PowerLogic meters and communication gateways and incorporate them into a SMS system. The SMS Setup Utility will be used to display real-time data tables for the purpose of verifying that meter CTs and PTs are correctly wired to the meters. The SMS Setup Utility will also be used to set up logging and event detection for each meter in the system.

Who should attend

Anyone who designs PowerLogic power monitoring systems, installs and configures PowerLogic meters and communications gateways, sets up and commissions new PowerLogic systems, adds metering and communications gateways to existing PowerLogic systems, or is responsible for troubleshooting issues with the metering and communication devices in new or existing PowerLogic systems.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Working knowledge and understanding of electrical terminology, concepts and calculations, including an understanding of the relationships among current, voltage, power and power factor in three-phase circuits

Students will be able to

- Explain the key features of PowerLogic power monitoring systems
- Determine the capabilities of specific PowerLogic metering devices
- Explain how to correctly mount and wire PowerLogic meters
- Use the PowerLogic meter display

- Set up communications to metering devices using PowerLogic Ethernet gateways
- Create and download data display web pages to the EGX400 and ECC21 gateways
- Use the PowerLogic SMS Setup Utility to create a system and set up metering devices
- Use the SMS Setup Utility to troubleshoot CT and PT wiring issues for metering devices in the system
- Use the SMS Setup Utility to customize the system
- Update the firmware for PowerLogic circuit monitors, power meters and Ethernet gateways

SMS Administrator

Course number: 3000PLUC300

Overview (four days)

This course focuses on topics for PowerLogic System Management software administrators. In a training lab environment, students will practice planning, installing, configuring and troubleshooting SMS4.0, the software component of a PowerLogic power monitoring system. The course focuses on the IT skills necessary to administer a windows 2003 server, a SQL database, and IIS web application. This course will also teach you how to protect your system data with a good disaster recovery plan.

Who should attend

This course is designed for SMS administrators and advanced PowerLogic system users who have taken the prerequisite courses and want to support, configure, maintain and troubleshoot the software component of a PowerLogic power monitoring system.

Prerequisites

- Reasonable understanding of Microsoft Windows operating systems
- PowerLogic Comprehensive Course or Installation and Troubleshooting Course

Students will be able to

- Administer and maintain a Windows 2003 server
- Successfully install or upgrade to a SMS4.0 platform
- Setup and configure an operating PowerLogic system within SMS with multiple user access level accounts
- Successfully install, utilize and administer SMS's Advanced Reports
- Support, customize and troubleshoot the SMS4.0 web interface
- Utilize database tools to manage your PowerLogic database
- Understand, develop and implement a good disaster recovery plan



Regional Training

SMS Software Solutions

Note:

These Courses can be bundled with the SMS Refresher CD

* Bundled Class Number: 3000PLUC195

** Bundled Class Number: 3000PLUC192

Regional SMS Overview*

Course number: 3000PLUC190

Overview (three days)

This regional three-day course is very similar to the four-day SMS Fundamental course except that we will spend less time on some topics. The course is still hands-on focused ensuring students leave with the skills and techniques needed to maximize the effectiveness of their PowerLogic System Manager software.

Who should attend

Technicians, operators and administrators looking to reduce utility cost, optimize equipment utilization and improve productivity using PowerLogic metering devices and software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Define and understand the different configurations of SMS
- Configure and communicate with PowerLogic devices using the different communication mediums and devices
- Navigate and utilize SMS Setup Utility to check on an existing system or configure a new system
- Differentiate between onboard and PC-based logging and configure upload tasks to collect historical data directly into the database
- Differentiate between and configure both onboard and PC-based alarming as well as digital and analog alarms
- Differentiate, capture, upload and view the different types of waveforms available in the PowerLogic power monitoring system
- Utilize, extract and view data using Information Manager, Advanced Reports, GFX and the SMS web client

Power Monitoring with SMS**

Course number: 3000PLUC191

Overview (two days)

This two-day intense regional class focuses on the collection and extraction of data with a SMS power monitoring system. Students will immediately begin configuring the system to log data and alarm on user defined set points. Students will also learn how to view real-time data remotely and extract data through a variety of reporting templates.

Who should attend

Technicians, operators and administrators looking to reduce utility cost, optimize equipment utilization and improve productivity using PowerLogic metering devices and software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Identify the different ways to view real-time and historical data from your system
- Differentiate between onboard and PC-based logging and configure upload tasks to collect historical data directly into the database
- Differentiate between and configure both onboard and PC-based alarming as well as digital and analog alarms
- Differentiate, capture, upload and view the different types of waveforms available in the PowerLogic power monitoring system
- Utilize, extract and view data using Information Manager, Advanced Reports, GFX and the SMS web client

On-demand Campus & Refresher CD

Course number: 3000PMUDEMAND

Overview

(12-month online access and training CD)

Today's economic times have presented companies with shrinking budgets, rising travel costs and limited manpower. PMU on-demand training offers solution content in a convenient and affordable online environment that allows our customers to get the valuable training where and when they need it. Customers will receive a 12-month subscription to the on-demand library and a refresher CD that focuses on the skills needed to manage a SMS or ION power monitoring systems.

Who should purchase this CD

Students who already attended the SMS Fundamentals/Overview or ION Fundamental/Overview courses and need a training solution to retrain on many of the skills learned at the instructor led course. SMS operators looking to train other users at their facility.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Check on an existing system or configure a new system
- Add a new communication device and metering devices
- Configure data logging within software application
- Configure digital and analog alarms
- Differentiate, capture, upload, and view the different types of waveforms
- Learn to extract information using the different reporting applications



Factory Training

Sepam



Square D® Sepam™ Industrial MV Relay Applications

Course Number: 3000PLU1SEP

Overview (four days)

This is an introduction to Sepam MV protective relays. The course begins with an introduction to the Sepam hardware and installation. Students navigate through the operator interface and use the SFT2841 commissioning software, including programming relays off-line, on-line and across a network. A case study will be performed throughout the course allowing students to set general parameters, protection functions, program logic and display alarms, events and waveforms. The course also provides a basic description of optional pre-configured control schemes e.g. bus transfer, zsi, control matrix, logic equation editor, logic interface, etc. The course concludes with a section on trouble-shooting and maintenance.

Who should attend

People who use, manage, maintain or are interested in Sepam protective relays.

Prerequisites

- Basic MV protection terminology (IEEE Std C37.2-1996)
- Basic computer skills and experience with Microsoft Windows

Students will be able to

- Install the Sepam base unit and accessories
- Navigate using operator interface
- Navigate using SFT2841 commissioning software
- Understand Sepam measuring principles
- Understand the ANSI protective functions
- Understand and use optional pre-configured control schemes
- Program using Logic Equation Editor
- Troubleshoot and maintain the Sepam relay

Online Webinar Training

Introduction to PowerLogic ION Enterprise Systems

Overview

This introductory webinar describes the key components and functions of a PowerLogic ION Enterprise system, including communication strategies and data logging. Patented ION technology and the Virtual ION processor are also explained. This webinar covers how third party device data can be brought into an ION Enterprise system, as well as how ION Enterprise can share information with other systems. Lastly, the graphical user interfaces, *Management Console*, *ION Database Manager*, *Vista*, *WebReach*, *Web Reporter* and *Designer* are explained.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Describe the key components of a PowerLogic ION Enterprise system
- Describe the key functions of a PowerLogic ION Enterprise system
- Describe how third-party device data can be brought into ION Enterprise
- Describe how ION Enterprise can share its data with other systems
- Describe the features of *Management Console* and *ION Database Manager*
- Describe the features of *Vista* and *WebReach*
- Describe the features of *Web Reporter*
- Describe the features of *Designer*

Conduct Real-time Power Monitoring Using *Vista* and *WebReach*

Overview

This instructor-led, hands-on webinar is part one of a three part series that provides the opportunity to view, retrieve, analyze and plot metering data using the *Vista* and *WebReach* interfaces. After an interactive demonstration of the main features of *Vista* and *WebReach*, you will log on to a real PowerLogic ION Enterprise system and use the software to complete several tasks including: compare present loads to past peak loads, reset historical peaks to start capturing new peak values, monitor breaker and equipment status, configure basic alarm settings and create custom alarm views.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Compare present loads to past peak loads
- Reset historical min/max values that are held in PowerLogic devices
- Monitor breaker and equipment status
- Configure basic alarm settings
- Create custom alarm views

Online webinar training (cont.)

Analyze Historical Loads and Consumption Using *Vista* and *WebReach*

Overview

This instructor-led, hands-on webinar is part two of a three part series that provides the opportunity to view, retrieve, analyze and plot metering data using the *Vista* and *WebReach* interfaces. After an interactive demonstration of the main features of *Vista* and *WebReach*, you will log on to a real PowerLogic ION Enterprise system and use the software to complete several tasks including: determine what measurements are logged in specific PowerLogic meters, compare the daily, weekly and monthly load profiles across multiple metering points, retrieve the peak demand for any time interval and determine monthly energy consumption.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Determine what measurements are logged in specific PowerLogic meters
- Compare the daily, weekly and monthly load profiles across multiple metering points
- Retrieve the peak demand for any time interval
- Determine monthly energy consumption

Analyze Power Quality and Waveform Data Using *Vista* and *WebReach*

Overview

This instructor-led, hands-on webinar is part three of a three part series that provides the opportunity to view, retrieve, analyze and plot metering data using the *Vista* and *WebReach* interfaces. After an interactive demonstration of the main features of *Vista* and *WebReach*, you will log on to a real PowerLogic ION Enterprise system and use the software to complete several tasks including: verify PQ meters are setup correctly for voltage disturbance monitoring, interpret PQ events, create customize PQ alarm views, plot voltage disturbance events on a CBEMA - ITIC curve, analyze the waveforms of captured voltage disturbance events.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Analyze the waveshape and harmonic composition of specific loads
- Verify PQ meters are setup correctly for voltage disturbance monitoring
- Interpret PQ events
- Plot voltage disturbance events on a CBEMA - ITIC curve
- Analyze the waveforms of captured voltage disturbance events



Create, Manage and Deliver Reports Using *Web Reporter*

Overview

This instructor-led, hands-on webinar focuses on how to create, manage and deliver reports using the new ION Enterprise *Web Reporter* interface. After an interactive demonstration of the main features of *Web Reporter*, you will log on to a real PowerLogic ION Enterprise system and use the software to complete several tasks including: describe the types of reports available with *Web Reporter*, create a “Trend” report for voltage, configure a “Load Profile” report, generate an “Energy Cost” report, generate a “Power Quality” report and setup automated report distribution via email, file share or printer.

Who should attend

Anyone who will be using ION Enterprise or is already using ION Enterprise software.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Describe the types of reports available with *Web Reporter*
- Create a “Trend” report for voltage
- Configure a “Load Profile” report
- Generate an “Energy Cost” report
- Generate a “Power Quality” report
- Setup automated report distribution via email, file share or printer

Building a PowerLogic Systems

Overview

This introductory course provides a guide for using the SMS Setup Utility to create a system. This includes creating a system and how the system must be in the edit mode for making changes. The student will add communication connections, add devices and test for communications.

Who should attend

Those who have the System Manager software and wish to learn more about how the system is put together for metering.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Create a system within the SMS Setup Utility
- Create communication connections
- Add devices to the various communication connections
- Bring the system online
- Perform a communications test
- Learn what the information means from the results of the communication test

Logging with the PowerLogic Systems

Overview

This introductory course provides a guide for using the SMS Setup Utility to view default logs that are setup from the factory. The student will create a log template and assign to a data log in the test meter. Perform an upload task and view collected data.

Who should attend

Those who have the System Manager software and wish to learn more about how the system is put together for metering.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Use an existing created system to view default logs
- Create a log template with specific data requirements
- Assign the newly created template to a log
- Generate an upload task to transfer the data from the meter to the database
- View the activity log and determine the status of their upload
- Review the errors codes from the help file
- Generate a table from the collected data

Online webinar training (cont.)

Alarming with the PowerLogic Systems

Overview

This introductory course provides a guide for using the SMS Setup Utility to view some default alarms set from the factory. Learn what the alarm priority levels are and what is required to clear them. Set up an alarm for a voltage swell conditions capturing a disturbance waveform.

Who should attend

Those who have the System Manager software and wish to learn more about how the system is setup to perform alarms.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Use an existing created system to view some default alarms
- Create a swell alarm from given requirements
- Assign a data log to the alarm to capture data during the alarm
- Generate a waveform capture due to the alarm
- View the alarm log and the active alarms and learn how to clear alarms
- Download the waveform from the meter and view
- Generate a table from the collected data

Graphics within the PowerLogic Systems

Overview

This introductory course provides a guide for using the GFX graphics package to produce a simple diagram. The student will use a basic main tie main one line background drawing and add meters and status switches. These will be tied to the SMS devices already setup by the student.

Who should attend

Those who have the System Manager software and wish to learn more about how to design a simple graphic screen to display meter readings and switch status.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Understanding of the basic concepts of energy and power

Students will be able to

- Use an existing created system to create a simple graphics screen to display metered values
- Learn how to use an existing diagram, drawing or photos to display metered data
- Create global digital function to display switch position on graph
- Assign values to be displayed from meters in the SMS system
- Create hyperlinks to various pages in the graphic program

Advanced Reports

Overview

The Advanced Reports class is a beginner's course to teach you how to use the report generating program for the PowerLogic System Manager software. The course will aid in your selection and running basic trend, energy usage and Time of Use (TOU) type reports. You will learn how to edit, schedule and export reports to various standard formats.

Who should attend

This course is for anyone with a PowerLogic monitoring system that is responsible for the reporting of facility's energy usage, power quality and cost allocation.

Prerequisites

- Basic computer skills and experience with Microsoft Windows

Students will be able to

- Learn
 - » how to access the program;
 - » what are basic requirements to run the program
 - » basic difference between Advanced Reports and the older reporting tool, Information Manager
- Review the basic interface panels of the program and their function
- Experience the use of the reporting wizard to run various reports
- Edit previous reports
- Export reports to various other formats
- Run some reporting labs

Introduction to Energy Management

Overview

The Energy Management class is a beginner's course to prepare you to manage your energy and establish an ongoing program. The course will aid in your selection and placement of metering gear. The attendees will analyze an electrical power bill. This analysis will enable you to understand the content of your bill and better equip you in negotiating a better power contract.

Who should attend

This course is for anyone with a PowerLogic monitoring system that is responsible for the management of facility's energy usage and cost allocation.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- PowerLogic Fundamentals Course (SMS or ION)

Students will be able to

- Understand reasons for energy management and setting a plan
- Learn the different power terms – such as energy, peak demand, power factor, real and reactive power – and how they interrelate
- Identify nature of service from the utility, meter locations and values metered to improve your bottom line
- Analyze the components of an electrical bill to determine an approach to managing your facilities energy
- Review a plant or facility one line diagram to better understand where savings can be realized
- Learn which PowerLogic products will aid you in your better managing you energy
- Learn about monitoring of (WAGES) Water, Air, Gas, Electric and Steam for full integration of energy needs

Power Quality

Overview

The Power Quality class is a beginner's course to aid you to understanding all the power quality issues and aid you in establishing a power quality program. The course will aid in your selection and placement of metering gear for better analysis of problems. The attendees will analyze various alarms and waveforms. This will be better equipped you in tracing root causes of power quality problems in your facility.

Who should attend

This course is for anyone with a PowerLogic monitoring system that is responsible for the facility's power quality. The course will aid you in making better use of their metering gear for better analysis. For example one will learn how to set sag/swell values to better track you incoming power on some critical load.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- PowerLogic Fundamentals Course (SMS or ION)

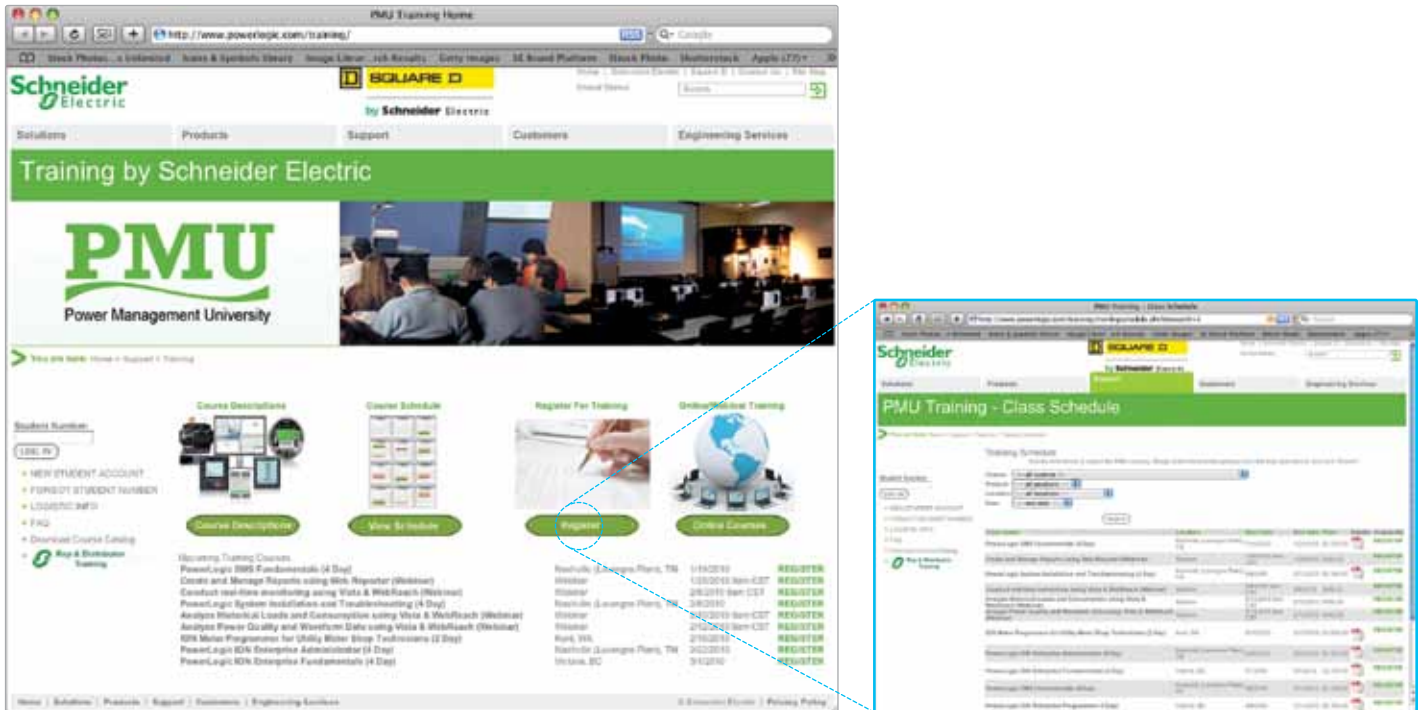
Students will be able to

- Understand the components needed to supply power and learn the potential power quality issues
- Learn the different power terms – such as energy, peak demand, power factor, real and reactive power – and how they interrelate
- Identify the seven major categories of power quality problems according to IEEE 1159-1995
- Review a plant or facility one line diagram to better understand where problems may occur. We will concentrate on common grounding and wiring problems which can cause major power quality problems
- Learn some mitigation techniques you may use to rectify problems
- Review some useful power quality instruments, which may aid you in performing your power quality survey
- Review some safety warnings and potential hazards
- Learn the basics of planning and performing a power quality survey

How to Register

There are several ways to register for a class:

1. Register online: Visit www.powerlogic.com/training



Click "Register" then follow steps below:

- Step 1: Choose product
- Step 2: Choose a specific course for that product
- Step 3: Choose a date for that course and click "Register"

After successfully registering, a confirmation e-mail will be sent to the e-mail address entered during the registration process.

2. Register by fax


Fill out the registration form located on the back of this catalog and then fax it to 615-287-3403 along with payment information.

3. Register by phone

Call us at 615-287-3304 and we will be happy to assist you with any questions.

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