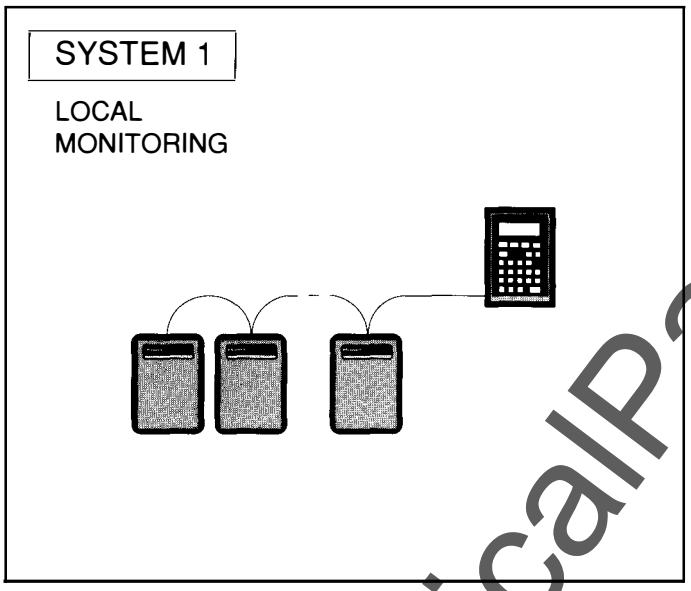
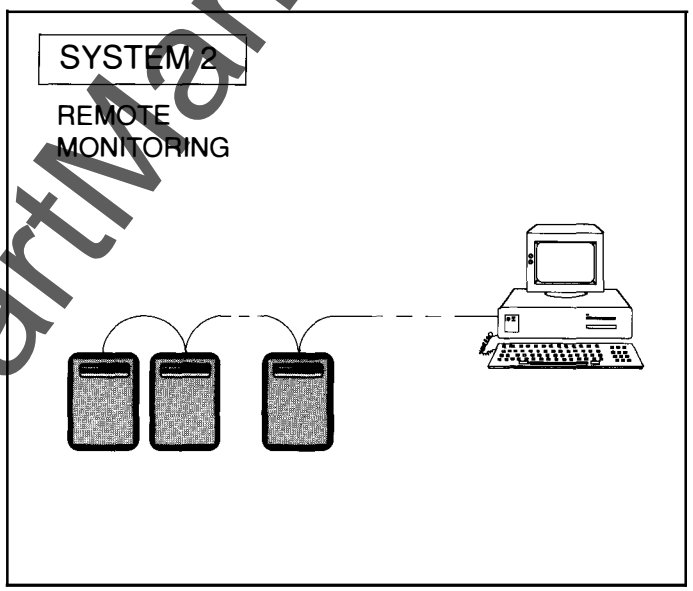
DESCRIPTIVE BULLETIN

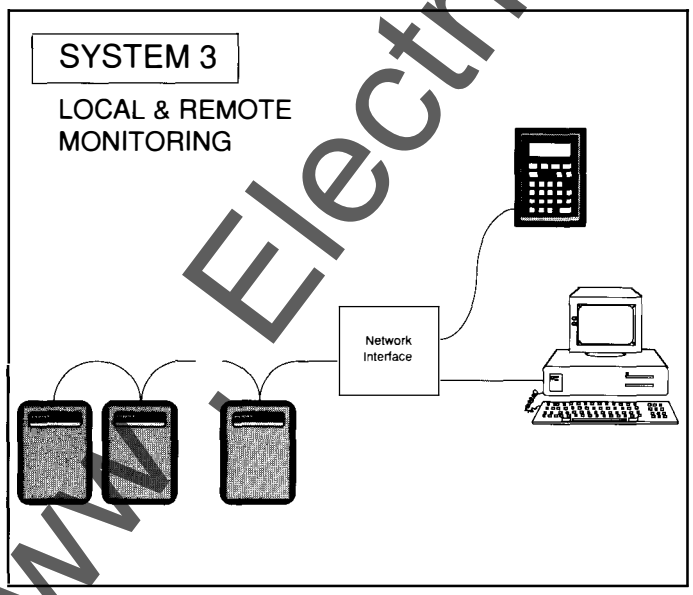
Bulletin DB-101 Rev 1 December, 1990

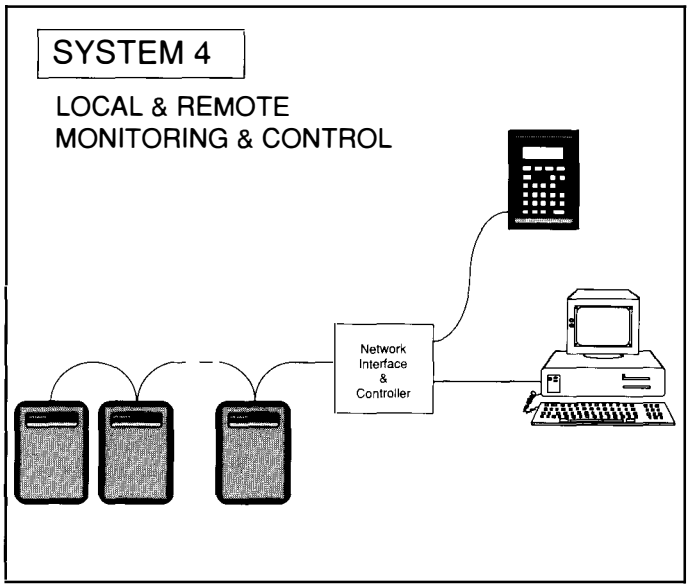
PowerLogic™

Power Monitoring and Control Systems





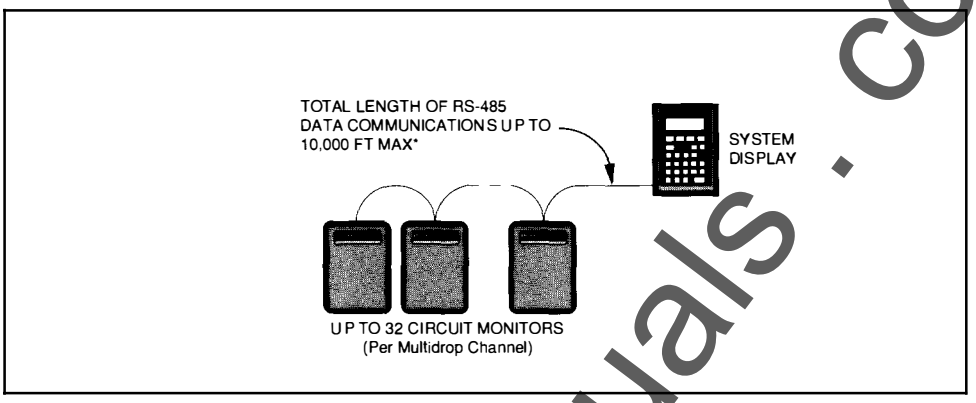




PowerLogic™ Systems

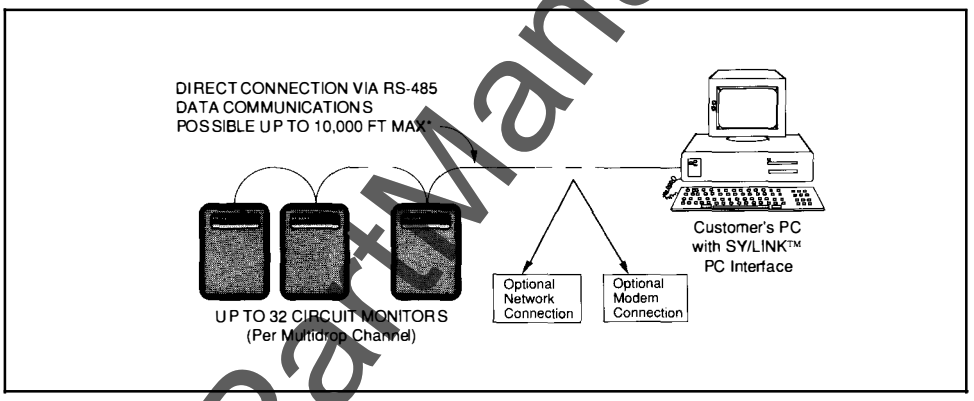
SYSTEM 1

LOCAL MONITORING



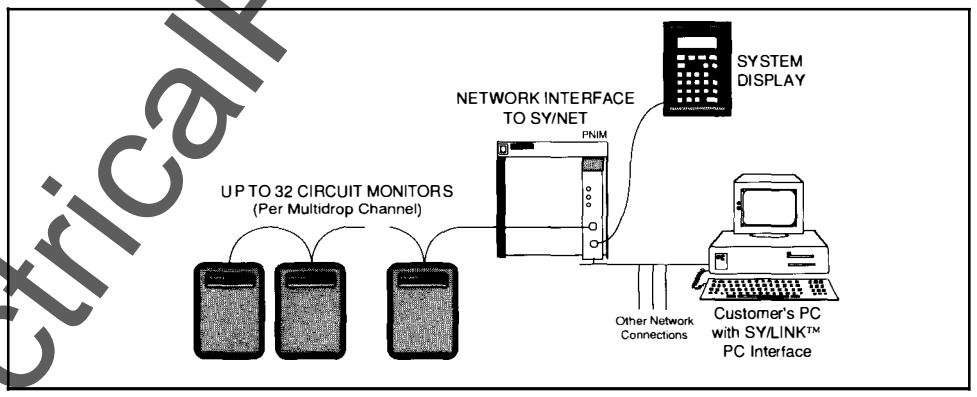
SYSTEM 2

REMOTE MONITORING



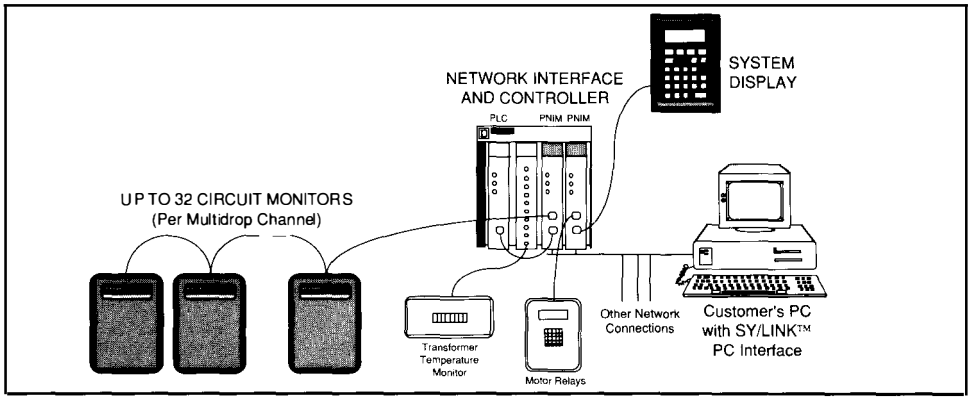
SYSTEM 3

LOCAL & REMOTE MONITORING



SYSTEM 4

LOCAL & REMOTE MONITORING & CONTROL (Custom)



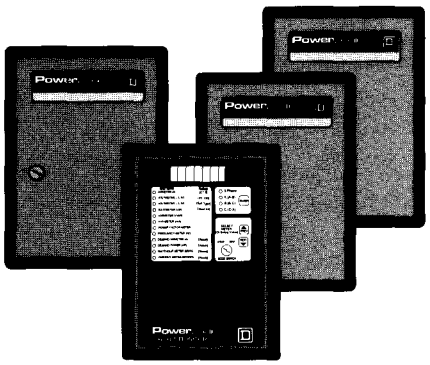
* Distance limitations may apply if more than 16 CMs.

System Options	Applications
• Monitoring of Status Inputs (e.g., Circuit Breakers "open/closed/tripped") • Customized Screen Displays (e.g. Alternate Screen Displays, Printer Forms, etc.) • RS-232 Port for Printout of Circuit Monitor Data on User Command	• In New Power Equipment or Retrofit of Existing Systems. • An Attractive Alternative to Conventional Metering, Offering Extensive Data on all Monitored circuits. • Where Power Equipment is in an Inaccessible Location, the System Display can be Remote-Mounted (e.g., at Floor-Level) for Operator Convenience and Safety.
• Monitoring of Status Inputs (up to 4 or 8 per CM) • Remote Control of Relay Outputs (up to 4 per CM) • Network Communications Interface for Connection of Additional Groups of (up to 32) CMs • Modem Communications Kit for Remote Access via Standard Telephone Lines • PowerLogic Application Software Series	• Especially Well-Suited for Retrofit of Existing Power Systems. • May be Used to Integrate Power System Circuit Instrumentation into Process Control System. • Provides Extensive Circuit Instrumentation and Waveform Data for Harmonic Analysis of Industrial Power System Environment. • Provides Centralized Monitoring of Distributed Power Equipment from One or More Locations.
• All System 1 and System 2 options • System Display Upgrade to SY/VIEW™ Color Workstation, with 80-Column by 25-line CRT Screen	• Offers Best-value Alternative to Conventional Metering and Transducers. • Premium, state-of-the-art instrumentation and remote monitoring for New Power Equipment, Especially Medium and Low-voltage Switchgear. • Allows Comprehensive Access to Power System Conditions and Data by Plant Personnel such as Plant Engineers, Maintenance, Accounting Department, etc.
• All System 1, 2, and 3 Options • Custom Automatic Control Functions Including: - Data-Logging, Event-Logging - Automatic Transfer Schemes - Load-Shedding, Sequencing - Power Factor Correction • Connections to Other Compatible Devices Including: - Motor Protection Relays - Transformer Temperature Monitors	• Used in Process Industries, and Others Requiring High Degree of Service Reliability. • Payback for Customers with Significant Energy Usage, Utility Penalties for Demand, Power Factor, etc. • Allows Power System to Become Part of Plantwide Monitoring and Process Automation Systems of Industrial and Large Commercial Facilities.

PowerLogic™ Components

CLASS 3020 - CIRCUIT MONITORS

- Instrumentation - Over 70 Metered Values
- Historical Circuit Data, Time and Dates
- Waveform Capture Option for Harmonic Analysis
- Models with On-Board Digital I/O (8 Status Inputs or 4 Inputs and 4 Relay Outputs)
- Models with Faceplate Keypad / Display
- RS-485 Data Communications - Standard

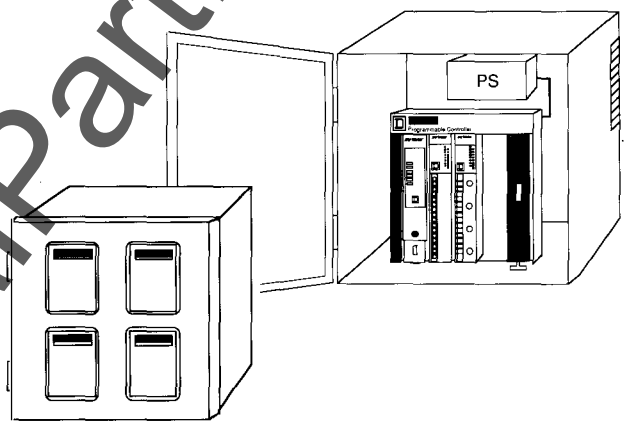


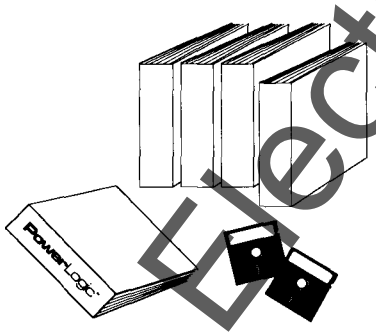
CLASS 3050 - SYSTEM DISPLAY

- Displays Data from up to 32 PowerLogic Circuit Monitors
- Additional Screen Memory Option for Customized Screens, Printer Forms, etc.
- RS-232 Port Option for Printout of Circuit Monitor Data on User Command

CLASS 3070 - PACKAGED SYSTEMS

- Quick-Start Kit for PowerLogic Circuit Monitor
- Enclosed Circuit Monitors, Pre-Wired (up to 4) for Retrofit
- Enclosed Network Interface to SY/NET LAN, with Expansion Slots, Optional System Display
- Modem Communications Kit with RS-232/422 Converter, Modem and Interconnect Cables Cables



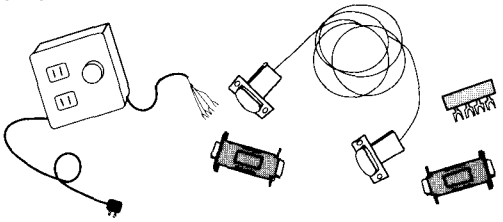


CLASS 3080 - APPLICATION SOFTWARE SERIES

- Product Communications Software
- System Manager Software
  - System Manager
  - System Manager Plus
  - Interactive Graphics Add-On
- Waveform Analysis Software
- Other Application Modules

CLASS 3090 - SYSTEM ACCESSORIES

- Multipoint Communications Adapter
- Multipoint Communications Terminator
- Interconnect Cables
- Aux. 120VAC Test Module
- Retrofit Kits



System Description

Standard Features

SYSTEM 1 - Local Monitoring

One or more PowerLogic™ Circuit Monitors (up to 32) can be directly connected to a PowerLogic System Display. Total length of the data communications link can be up to 10,000 feet, allowing for convenient location of the System Display.

The PowerLogic System Display provides real-time access to all Circuit Monitor instrumentation and historical data.

Available information includes instantaneous meter readings, demand history, energy consumption, min/max historical data, energy management alarm history and present status.

All necessary system setup functions are supported, allowing independent operation as a stand-alone system.

SYSTEM 2 - Remote Monitoring

One or more PowerLogic™ Circuit Monitors (up to 32) can be directly connected to a personal computer (equipped with SY/LINK® PC Interface board).

A SY/LINK® PC Interface Board installed in a personal computer performs all communications processing, relieving the PC's processor from these tasks.

A wealth of information is accessible for real-time monitoring and control, with a variety of user functions available, depending on the software option(s) selected.

SYSTEM 3 - Local & Remote Monitoring

One or more PowerLogic™ Circuit Monitors (up to 32) can be connected to a PowerLogic Network Interface Module (PNIM) for connection to the SY/NET® Local Area Network (LAN). A PowerLogic System Display is connected to a second port on the PNIM to provide local monitoring.

System 3 combines the local monitoring features of System 1 with the remote monitoring features of System 2.

The SY/NET® Local Area Network connection is standard, providing a direct connection back to a PC with installed SY/LINK® board.

The SY/NET Network also provides for connections of additional groups of Circuit Monitors as well as multiple personal computers or controllers.

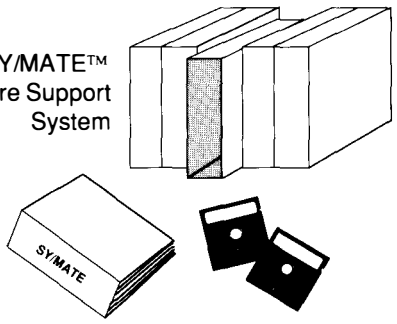
SYSTEM 4 - Local & Remote Monitoring & Control

In addition to the components shown for System 3, a SY/MAX® programmable controller can be used to provide automatic control capabilities on a custom basis.

System 4 offers the local and remote monitoring capabilities of System 3 plus automatic control functions tailored to individual customer requirements.

Furthermore, any PowerLogic™ System configuration may be easily upgraded from one level to the next as the customer requirements change or as the system expands.

PowerLogic™ Custom Solutions



SY/MATE™
Software Support
System

SOFTWARE SUPPORT TOOLS

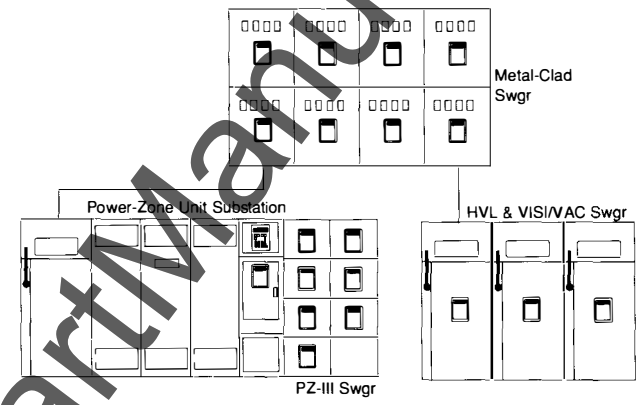
Standard software support tools are available from Square D to allow customers the flexibility of customizing their own PowerLogic monitoring and control systems:

- 234 Link™ Spreadsheet Interface to Lotus® 1-2-3®
- Screenware2™ Color Graphic Interface
- Cell Link™ Supervisory Software for Cell Control

APPLICATION ENGINEERING SUPPORT

Square D offers application engineering support to further customize the PowerLogic system to meet specific customer requirements.

- Customized PC Workstations
- Customized Screen Displays and Reports
- System Engineering
- On-Site Start-Up
- Customer Training



RETROFIT EXISTING POWER SYSTEMS

PowerLogic Circuit Monitors and System Components can be applied to existing systems — via connections to standard instrument transformers. (5A CTs and 120VAC PTs).

NETWORK SQUARE D POWER EQUIPMENT

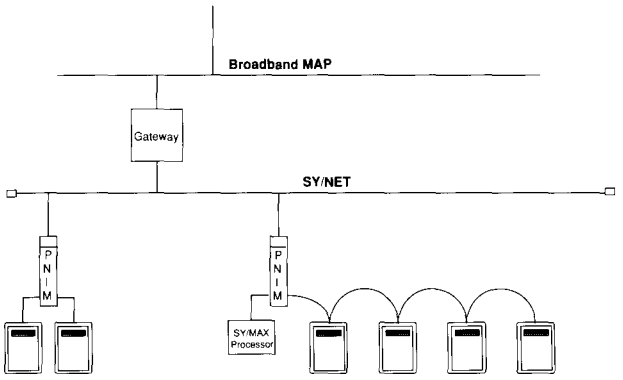
PowerLogic components can be furnished as an integral part of new Square D power equipment and comes completely configured for the customer's application

- M.V. Metal-Clad Swgr.
- M.V. Metal-Enclosed Swgr.
- Unit Substations
- L.V. Switchgear
- Switchboards, MCCs...

COMBINE WITH POWERFUL AUTOMATION OPTIONS

The PowerLogic family of products are compatible with Square D's line of Automation Products. Therefore, PowerLogic components and systems can be integrated with plantwide solutions for process control, involving the following:

- SY/MAX® Programmable Controllers
- Mini-Cell, Micro-Cell Controllers
- SY/NET® Local Area Networks
- Interconnectivity with other Networks (Ethernet, MAP, etc.)



For Further Information - Contact your nearby Square D sales office or call or write to :
Square D Company • PowerLogic • 330 Weakley Rd • Smyrna, TN 37167 • Ph (615) 459-8500

SQUARE D COMPANY

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