70 Series IEDs

The 70 Series Intelligent Electronic Devices (IEDs) perform multiple measurement, recording and control functions as standalone units or an integrated system.

SCADA and Local Indication

70 Series IEDs provide real-time data to multiple SCADA masters using different protocols simultaneously, including IEC 61850. Detached displays present data locally on mimic panels and other substation equipment.

Automation and Control

70 Series IEDs can be used to automate a substation – including supervisory control, distance to fault, sequence of events, oscillography recording, and other advanced measurements – while preserving existing investments in electromechanical relays. 70 Series high-speed measurements and communications may also be employed to perform synch-check and auto-synch applications for generators and bus ties.

Distributed Disturbance Recording

Engineers can make better and faster diagnoses using up to seven highly configurable, time-synchronized recorders with advanced triggers settings (including cross-triggering via GOOSE messaging).

Other Features

- Copper and Fiber Ethernet Communications
- Quarter-Cycle (4ms) Measurement Update
- IRIG-B Timstamping to 1ms
- IEC 61850 Compliant Measurement Server
- Common Firmware and Configuration Toolset
- 0.1% Accuracy
- Trend Recorder (Comtrade)
- Two Oscillography Recorders (Comtrade)
- Two Disturbance Recorders (Comtrade)

- Sequence of Events Recorder (csv text)
- 0-5A, 20X Over range
- Status Inputs/ Transducer Inputs
- Relay Outputs/ Transducer Outputs
- Over 2000 Measurements Including

  - V, A, F, P, E, H, M
  - Harmonics to 63rd
  - Flicker
  - Phasors
  - Sequence Components
  - Impedance
  - Distance to Fault

M872 – Dual Line, Dual Bus Modular IED

The M872 IED provides a complete solution for monitoring and recording in substation applications. The advanced measuring, recording, and communications characteristics and utility-grade construction make it suitable for applications in AC distribution and transmission systems. The ability to measure 2 sets of 3-phase voltage and current inputs in one IED provides a cost-effective solution in recording and monitoring applications.

M871 – Single Line, Dual Bus Modular IED

The M871 IED provides a complete solution for monitoring and recording in substation applications. The advanced measuring, recording, and communications characteristics and utility-grade construction make it suitable for applications in AC distribution and transmission systems.

M870D – Detached display for use with the 70 Series IEDs

The M870D provides users of the 70 Series IEDs the option of a local or remote indication of measured or calculated parameters. It is compatible with previous PowerServe versions through software upgrades in the field.

M572 – Compact Dual Line,Dual Bus IED

The M572 is a monitoring and recording IED for dual line, dual bus applications.

By covering two lines or feeders, the M572 provides an economical solution for basic measurement to SCADA data, while also providing advanced recording and communications functions not found in basic measurement devices. The M572 IED provides fast and precise electrical measurements, fault records, event records, and trend logs.

Optionally, the monitoring of status inputs and the control of relay

outputs can be accommodated. This information and control can be provided to multiple clients or masters simultaneously through various protocols and multiple physical links. An option is available for copper and fiber Ethernet ports.

The M572 supports the 70D Display Family of separately mounted displays. The compact form of the M572 is an efficient design with options selected and built-in at time of order. The M572 is part of the 70 Series Measurement System using common firmware and software.

M571 – Compact Single Line, Dual Bus IED

The M571 is a monitoring and recording IED for single line, single or dual bus applications. The M571 IED provides fast and precise electrical measurements, fault records, event records, and trend logs. Optionally, the monitoring of status inputs and the control of relay outputs can be accommodated. This information and control can be provided to multiple clients or masters simultaneously through various protocols and multiple physical links. An option is available for copper and fiber Ethernet ports. The compact form of the M571 is an efficient design with options selected and built-in at time of order. The M571 supports the 70D Display Family of separately mounted displays. The M571 is part of the 70 Series Measurement System using common firmware and software.

M570DA – Detached display for use with the M570 Compact Family of IEDS

The M570DA provides users of the M570 Compact Family of IEDs the option of a local or remote display of measured or calculated parameters.