DOBLE PROTECTION TESTING

PROTECTION SUITE

Protection Testing Software

MODERN INTERFACE FOR PROTECTION TESTING, DATA MANAGEMENT & COMPLIANCE REPORTING

Doble Protection Suite is a complete, no-compromise, protection testing solution. Run manual and automated tests for protection-scheme verification, including distribution, transmission, generation, and IEC 61850 sampled values and GOOSE schemes. Protection Suite includes a library of relay test plans—use this flexible software to perform tests from a test-plan library, create and modify test plans, and create unique tests from scratch. Protection Suite, used with PBLite and PowerBase, is a comprehensive data-management system for storing, trending, system planning analysis and for reporting to regulatory agencies.

FEATURES

- Instrumentation control and firmware version management
- Applications for testing relays, CT/VT wiring to relays, phasor measurement units, transducers and meters
- Sequencing of realistic power system events using COMTRADE samples formatted into userdefined states
- Transient wave form streaming for advanced harmonics testing
- Digital, IEC 61850 testing of IEDs and verification of GSE, GOOSE, R-GOOSE, and 9-2LE sampled values
- Test data and settings management with reporting and security

BENEFITS

- Limitless incorporation of formulas, worksheets and scripting for powerful, customized test operations
- Expansive set of industry-proven, pre-built steady state and dynamic tests
- Settings-driven visual protection characteristics and test functions
- Ability to create power system models and perform end-to-end fault location testing in state simulations
- Customizable solutions for manual data entry and management of documentation

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CONTROL PANEL EDITION

Limited to use of F6 Control Panel interface within Protection Suite software for manual configuration and operation of sources, logic I/O and timers:

- Manually test relays and transducer/metering devices using F6000-series power system simulators
- Real-time indications of source values and status of logic I/O and DC meter inputs
- Includes Battery Simulator
- Included permanently with the purchase of F6150 Power System Simulators. Unlimited users (requires active M&S).

CALIBRATION EDITION

Provides software interface within Protection Suite for use in conjunction with the F6080 Field Calibrator instrument:

- Use with F6150 Power System Simulators
- Includes F6Control Panel

BASIC EDITION

Limited to basic F6000-series instrument controls and includes:

- F6 Control Panel
- F6080 Field Calibrator interface
- State Simulator (256 states) for modeling and testing fault/ reclosing schemes
- Power System Models for generating fault values
- COMTRADE Playback for streaming actual recorded faults during tests
- .SS1 and .SS2 Playback
- End-to-End Testing
- ProTesT Converter (test plans and results)
- Formula Support (custom parameters) for added consistency and efficiency
- Analog/Digital Meter and Transducer testing (with F6800 option)
- CT/VT Polarity and Wiring tests
- 8-Channel DFR (with F6820 Analog Input Measurement option)
- Report Builder with options for customized reports and templates

ADVANCED EDITION

Includes **Basic Edition** features and adds:

- Visual Protection Characteristics
- Specialized Applications for Harmonic Ramp, PMU and Current/Frequency/ Voltage Rate-of-Change
- Data Entry/Information test types for manual data entry of notes and test results
- Compliant with PB Lite, PB Field (PowerBase) and Administrator option

PROFESSIONAL EDITION

- Includes **Advanced Edition** features and adds the ability to develop and edit tests

OFFICE EDITION

Includes **Professional Edition** features but does not offer instrumentation connectivity.

- Develop and organize test plans, approve work and run reports
- Ideal for supervisors and administrators