

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



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



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Specifications are subject to change without notice.
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