

# Substation Integrated Automation System Software

This substation integrated automation system software integrates protection, control, monitoring, measurement, and other automation functions. The system adopts advanced fieldbus technology, computer technology, and network technology.



## System Overview

### SDY-2100(BD) Integrated Automation System

The SDY-2100(BD) is a next-generation substation integrated automation system designed for voltage levels of 110kV and below. It employs a layered distributed architecture that integrates protection, control, monitoring, and measurement into a unified microcomputer network. The system is engineered for 'unmanned duty' operation, offering high reliability and openness for remote scheduling and substation MIS integration.

## Technical Architecture

System Structure	Layered Distributed, Bay-Level Object Oriented, Star Network, Bus Network
Hardware Platform	32-bit Microprocessor
A/D Converter	16-bit High-speed

## System Capabilities

### Integrated Functions

- Protection and Control
- Fault Recording
- Small Current Grounding Selection
- Low-frequency Load Shedding
- Reactive Power Compensation
- Five Preventions (Interlocking)

### Communication Protocols

IEC 60870-5-103, Ethernet, Fiber Optic Support

## Operational Features

### Key Operational Highlights

- Accurate GPS Time Synchronization
- Multimedia Voice Alarm System
- Operation Ticket Expert System
- Simulation Training System
- Self-Diagnostic Monitoring

### Environmental Resilience

High Temperature Resistant • Electromagnetic Interference Protected • Moisture Resistant