

BL6000/8000

电力智能保护测控装置及自动化监控系统
Electric Protection & Monitor Devices and Automation Systems

BL6000 电力变电站综合自动化系统

BL8000 大型企业电力调度综合自动化系统

BL6000/8000 Electric Automation Systems

产品概述

BL6000/ BL8000 综合自动化系统是为供电企业配电网安全、经济和优质运行服务的监视控制和辅助管理系统。它以信息化为基础,将配电系统在线数据和离线数据、配电网数据和用户数据、电网结构和地理图形进行信息集成,构成完善的自动化系统,实现配电网及其设备正常运行及事故状态下的监测、保护、控制以及用电和配电挂网的自动化,其最终目的在于全面提高城市配电网的供电可靠性、电能质量、用户满意度和供电企业的社会经济效益。

它实现并完成变/配电站运行实时数据的采集、处理、存储、监视和控制,并对变/配电站进行分析、计算与决策,是变/配电站自动化系统不可或缺的核心软件系统。是具有跨平台运行能力,既可以在 windows2000/xp/windows2003/windows 7 等流行的操作系统上,也可以运行在 windows 2000 server/windows2003 server 等专业服务器操作系统。采用高可靠性、高稳定性标准 SQL SERVER 数据库查询语言定义及操作数据库,支持并行操作、数据库的动态扩展等,为用户的二次开发提供保证。通讯子系统全部支持 ISO 开放式系统互联 (OSI) 七层模型结构,采用标准网络协议: TCP/IP 和应用层协议 DL/T476-2012 和 IEC60870-6 TASE II 等。

Product Summary

BL6000/ BL8000 integrated automatic control system belongs to control and management subsystem designed for improving distributing network safety, economical efficiency and fine operation of electricity enterprise. Based on information, it composes a perfect automatic system via integrating on-line data and off-line data of distributing system, distributing network data and customer data, grid structure and geographic map etc., realizes monitoring, protection, and control of distributing network and the equipments under normal condition and accidental state, and automation of power utilization and distribution. In the future, it shall also be used for fully improving reliability of municipal distributing network, quality of electric power, customer satisfaction, and socioeconomic performance of electricity enterprise.

BL6000/ BL8000 integrated automatic control system is a special software platform of electricity automation. It realizes and completes data acquisition, processing, storage, monitoring and control of transformer/distribution station in real time, analyzes, calculates and decides transformer/distribution station, and works as indispensable, core software system of transformer/distribution station automatic system. It adopts high-reliability, high-stability SQL SERVER, supports parallel operation, dynamic expansion of database and secondary development of customer and can be used on systems such as windows2000, xp/windows2003, windows 7, windows 2000 server and windows2003 server etc. The communication subsystem fully supports ISO OSI Network architecture 7 layers model, and adopts standard network protocols: TCP/IP, application layer protocol DL/T476-2012 and IEC60870-6 TASE II etc.

系统组成

BL6000/ BL8000 综合自动化系统是典型的变/配电站自动化系统,它具有分布式结构,由服务器、服务器、主站、网络设备、安全防护设备、时钟同步装置等硬件设备及配套软件构成。主站关键设备及软件应用服务采用冗余配置。

主站系统应用软件的主体是 SCADA 子系统, SCADA 子系统主要完成基本的数据采集和系统监视控制功能。主站系统具有高安全性、高可靠性、实时性以及强大的数据处理能力,它主要包括以下功能模块:

- ☆ 数据采集及处理 实时数据库 历史数据处理 人机界面
- ☆ 实时信息告警(实时语音合成播报系统) 事故追忆 计算机网络管理
- ☆ 图形编辑 图元编辑 遥控遥调 报表统计及打印 实时、历史曲线
- ☆ 操作票 五防功能 电压无功补偿功能(VQC) 历史告警分类查询
- ☆ WEB 访问 双机冗余热备 接口规约转换管理 权限配置管理
- ☆ 数据库配置管理 数据库备份与还原 数据统计

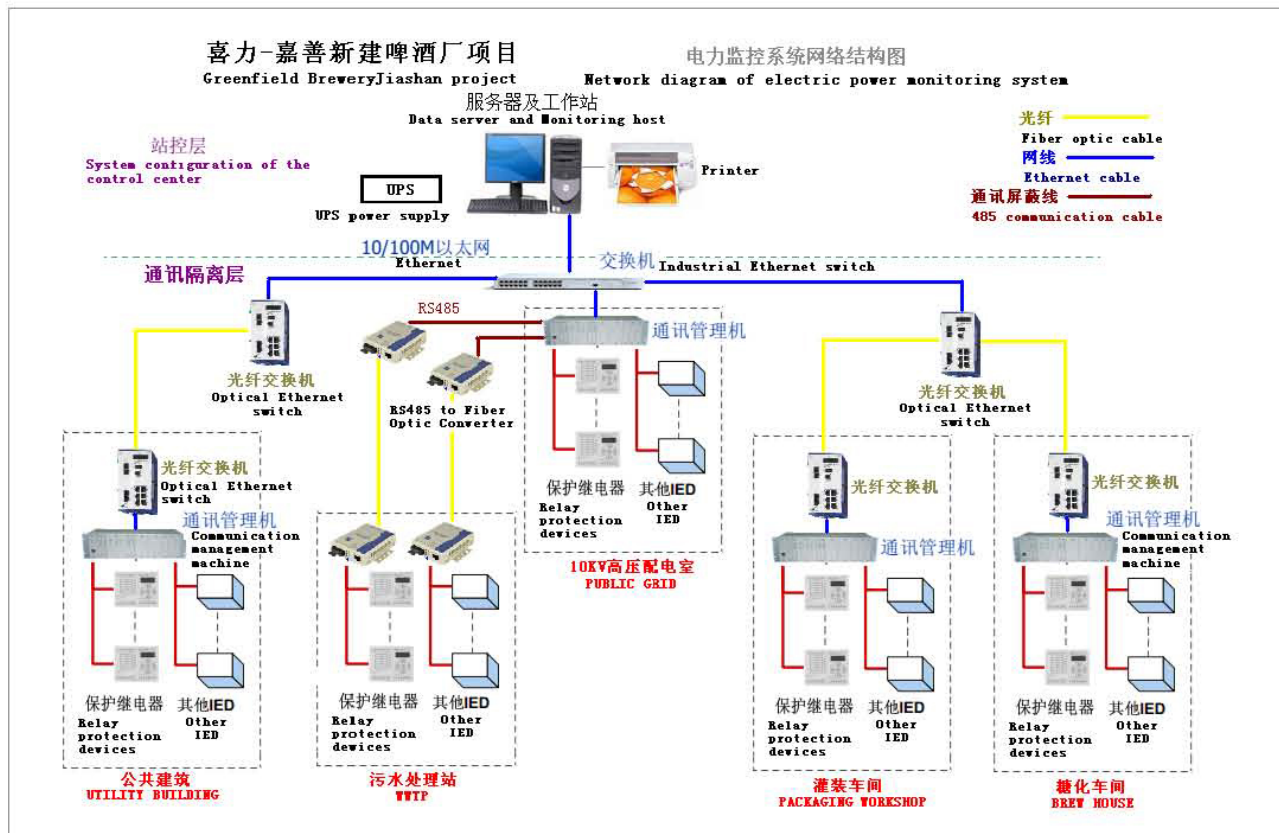
System composition

BL6000/ BL8000 integrated automatic control system is a typical transformer/distributor station automatic system. It adopts distributed structure and consists of hardware equipments such as server, main station, network equipment, safety protection equipment, clock synchronizer etc., and matching software. Key equipment of main station and software application service adopt redundant configuration. Principal part of application software of main station system is SCADA subsystem. SCADA subsystem mainly completes basic data acquisition and supervisory control of system. Main station system is provided with high security, high reliability, real-time and strong data processing capability and mainly consist of following functional modules:

- ☆ Data acquisition and processing, Real-time database, History data processing Human-computer interface
- ☆ Real-time information warning (real-time voice synthesis and broadcast system), Accident retrospection, Computer network management
- ☆ Graphics edition, Primitive edition, Remote control and remote adjustment, Report statistic and printing, Real-time and history curve
- ☆ Operation ticket, Five-protection, Voltage reactive compensation (VQC), History warning sort query
- ☆ WEB access, Dual redundant hot backup, Interface protocol convert management, Purview configuration management
- ☆ Database configuration management, Database backup and reduction, Data statistics



变电站监控系统架构图 Substation Monitoring System Structure



工程案例 Construction Case