SUBNET
SubSTATION Server

An advanced data concentrator and protocol converter unifying all substation data.

Make substations more intelligent with SubSTATION Server, the most advanced, versatile and secure substation data management server available. Its unparalleled power and ease of use make it the integration solution of choice for over 100 utilities worldwide.

Any Device to one Unified SubSTATION Intelligence System

SubSTATION Server and SubSTATION Explorer are designed to be deployed at substations. These two STATION intelligence products help convert substations full of smart relays and smart meters into a smart substations. The goal of STATION Intelligence is to unify the information from any Field Device while making the information more intelligent and secure. SUBNET's SubSTATION intelligence products are easily upgradeable software applications, so as substation technology moves forward, electrical utilities can keep up with the changes without having to upgrade or replace their existing IEDs.

Benefits of SubSTATION Server

- SubSTATION Server is a multi-function software application that performs data concentration, protocol translation, automation logic, event file collection and enterprise connectivity.

- SubSTATION Server is a powerful multi-function substation integration solution that replaces outdated RTU data concentrators, relay communication processors and other legacy integration devices.

- Save utilities time and money by eliminating the need to purchase, configure and maintain multiple different legacy integration devices.

- Avoid limitations of IED vendor-specific integration devices with SubSTATION Server's true multi-vendor integration capabilities that support rich integration for virtually all major IED vendors.

- Enables utilities to get more out of existing IED investments by helping them avoid unnecessary IED upgrades and replacements just to add new IED communication or security functionality.

- Save time driving to substations to communicate with IEDs - use SubSTATION Server's secure remote access functionality (NERC CIP compliant).

- Mitigate the effect of substation outages with automated collection of Relay Event Records with timely and informed restoration actions.

- Use SubSTATION Server's advanced redundancy capabilities and implement a reliable and seamless upgradeable automation solution.

- Avoid technological obsolescence issues of traditional substation integration solutions with SubSTATION Server which leverages, and evolves with, mainstream networking and computing technologies including Microsoft and Intel, versus proprietary embedded IED vendor computing technologies.

- Scalable software enables solution support ranging from the smallest distribution sites to your largest transmission substations.

Event File Collection

- Automated fault record collection of oscillography and event files with support for native SEL and GE fault records.

- Supports full SEL-20XX dial-up emulation with added integrated user authentication to facilitate secure replacement solution for SEL Relay communication processor dial-up access.

- Supports secure automated file transfer of fault records to centralized archive (such as PowerSYSTEM Center My Faults solution).

- Encrypted automated file transfer securely transports substation data files for use by third party computer applications.

Configuration Tool Features

- Intuitive, Windows-based graphical configuration tool supports online and offline device configuration.

- Supports easy-to-use visual drag-and-drop configuration interface.

- Use Microsoft Excel to easily manage large point configurations.

- Customizable user interface letting user define very basic or extremely detailed information views.

Alarm Module

- Supports both analog and digital alarms.

- Configure multiple alarm styles.

- Provides alarm summary and logging functions.

Hardware Choices

- Choose the hardware you want to use to run SubSTATION Server.

- Hardware options are available from SEL, GE, Compton Greaves, Transduction and more.

Protocol Communications Features

- Large library of richly-implemented SCADA Master and Slave Protocols.

- Expansive protocol source code library enables straightforward implementation from over 40 additional legacy protocols on as-required basis.

- Local/remote control lockout of SCADA controls.

- Industry's most advanced SEL protocol communication support with complete auto-configuration.

- Support for flexible parsing of SEL ASCII, generic ASCII and binary-based communications for unique devices.

- Supports channel redundancy.

- Compatible with the latest in industry standard protocols including IEC 61850.

- Support for the SNMP protocol so network and IT assets within substations can be monitored.

- Control lockout for individual controls.

- Support for synchrophasors for improved stability and boundless event recording.

Security Features

- Integrated Microsoft security capabilities to facilitate NERC CIP compliance.

- Single Sign On / Multifactor Authentication.

- SSL/TLS Encryption Capabilities.

- Secure authentication and encryption of IED pass-through communication.

- Supports secure automated file transfer.

Enterprise Integration Features

- Native data historian interfaces including automated point creation and configuration for OSIsoft PI and Instep eDNA systems.

- Integrated data logger that supports customizable data logging.

- Supports OPC standards-based client and server interfaces.

- Supports advanced, integrated HMI capabilities.

Logic Features

- Powerful logic functions through a built-in calculator and an IEC 61131-3 logic engine.

- User friendly calculation engine that supports arithmetic, trigonometric, programmatic and boolean logic functions.

Integration Troubleshooting Features

- •Integrated communication diagnostic tool allows viewing of raw communications data for any connection to aid in troubleshooting communication problems.

Time Sync Support

- Extensive support for various time synchronization methodologies, and will accept time synchronization signals from SNTP/NTP Servers, IRIG-B (un-modulated/modulated), and SCADA protocols.
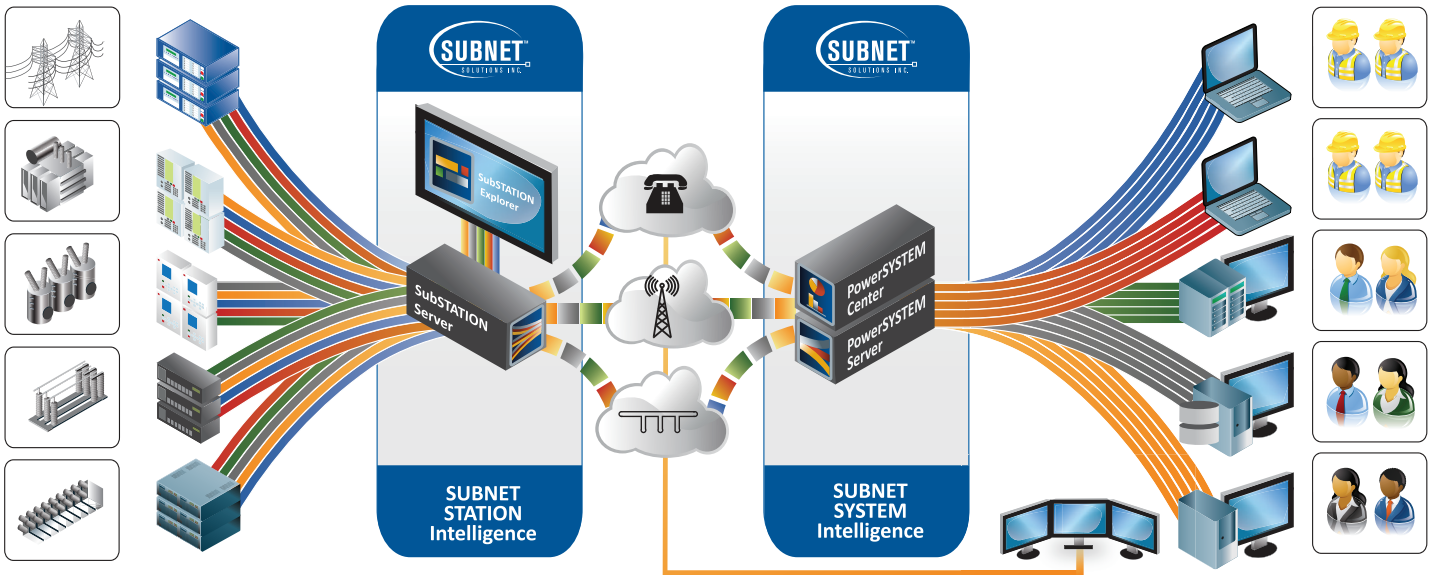
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System Redundancy

- Warm redundancy increases reliability.

- Configure secondary system automatically using files from the primary system.

- Supports network separation.

Making Substations More Intelligent®

Official Solution of the Unified Grid Intelligence Technology

SUBNET
SOLUTIONS INC.

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The SUBNET SubSTATION Server is part of SUBNET's Unified Grid Intelligence philosophy. This holistic approach provides interoperable solutions between many different field devices, to many different business systems, over many different types of communication networks. The goal of these solutions is to provide true multi-vendor, multi-function interoperability. SUBNET's solutions integrate with utilities' existing IEDs, IT networks, and engineering productivity tools to deliver data efficiently and securely to analysts, maintenance personnel, engineering departments, and operations.

About SUBNET Solutions, Inc.

SUBNET Solutions Inc. is a global software solutions provider for electric utilities. SUBNET focuses on Making Substations More Intelligent®. Founded in 1992, SUBNET is an industry leading provider of intelligent solutions that securely connect real-time electric utility field information with utility business systems to enable smart grid solutions. Over 200 utilities worldwide rely on SUBNET software to safely manage and monitor thousands of substations.

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