AX-S4 61850

The Complete Interface for Windows Applications

OVERVIEW

AX-S4 61850 ("Access for 61850") provides access to real-time data via IEC 61850 for any Windows compatible application supporting OPC Data Access (DA). AX-S4 61850 gives you a high-level interface to real-time data that lowers your integration cost by providing you everything needed to interface IEC 61850 with standard off-the-shelf OPC based applications on the Windows platform in a single easy -to-use solution including an IEC 61850 client, an IEC 61850 server, an IEC GOOSE publisher/subscriber and an interactive Object Explorer for debug and testing of devices.

AX-S4 61850 is optimized to allow standard OPC products to interface with IEC 61850 devices by automatically handling most of the unique features of IEC 61850 automatically and transparently. This enables off-the-shelf products to be used effectively with IEC 61850 devices without complex scripting, logic, and special handling by the OPC applications.
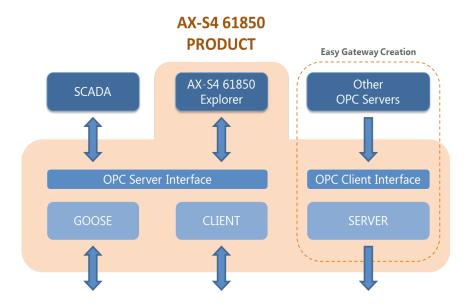
SUPPORT

- **Support for IEC 61850 Ed.1 and Ed.2 including parts 6, 7-2, 7-3, 7-4, 8-1, 7-410, 7-420, and IEC 61400-25-2 including GOOSE multicast services**

- **IEC 61850 Client Functions:**

  - SCL import to configure single devices or everything for a substation client in one operation.
  - Object discovery and configuration using ACSI services over TCP/IP
  - Aautomated buffered and un-buffered reporti handling
  - Controls (direct, SBO, normal/enhanced security) , logs and file transfer
  - IEC 62351 security functions for strong authentication and encryptions using digital certificates
  - OPC V3.00 DA Server supports transparent time stamp and quality mapping

- **IEC 61850 Server enables support for proxies, data concentrators, gateways and to expose OPC data from applications as IEC 61850 data**

  - Server configuration via SCL (IEC 61850-6) supporting mapping of IEC 61850 objects to external OPC server for dynamic data and fixed value initialization for static data
  - User configurable read/write access and group update rate to any object
  - Buffered and un-buffered reporting with dead band processing
  - Controls (Direct and SBO via normal security)
  - Object discovery by clients using ACSI services
  - IEC 62351 security functions for strong authentication and encryptions using digital certificates
  - OPC V3.00 DA Client

- **IEC 61850 GOOSE publisher/subscriber**

  - Configuration via SCL (IEC 61850-6)
  - User configurable retransmission curve
  - Mappable to IEC 61850 Server for fully functional GOOSE control blocks
  - OPC V3.00 DA Server

FEATURES

- **Automatic report subscription and dataset handling supports re-enabling of reports after power down or device disconnects and enables data flow without OPC client interaction**

- **Automated mapping of IEC 61850 quality and timestamp data to OPC quality and timestamps**

- **Simplified control functions support single object write operations**

- **Interactive object explorer for device and object visualization, debug, testing, configuration, and control**

- **A complete solution in a single easy to use package that includes:**

  - IEC 61850 Client - OPC Server
  - IEC GOOSE pub/sub - OPC Server
  - IEC 61850 Server - OPC Client
  - IEC 61850 Object Explorer

- **Flexible association management for the IEC 61850 client:**

  - Up to 8 IP addresses can be set for each remote device. AX-S4 61850 will attempt to connect to all addresses when establishing an association
  - Automatic retry and timeouts with a "keep-alive" feature for report only associations
  - Association control and reconfiguration items exposed to OPC clients to override automatic association management functions

- **Secure communications using IEC 62351 supporting TLS encryption and X.509 digital certificates for strong application authentication**

- **Compatible with hundreds of OPC applications supporting OPC Data Access V3.0 and V2.05a**

**AX-S4 61850
PRODUCT**

Easy Gateway Creation

SCADA	AX-S4 61850 Explorer	Other OPC Servers

OPC Server Interface		OPC Client Interface
GOOSE	CLIENT	SERVER