

# AX-S4 61850

The Complete Interface of Windows Applications



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## 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) and DDE interfaces. 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 package. All the essentials needed to interface Windows applications to IEC 61850 devices are bundled in a single easy-to-use solution including an IEC 61850 client, an IEC 61850 server, and an IEC GOOSE publisher/subscriber.

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. 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.

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## SUPPORT

- **Support for IEC 61850:2003 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:**
  - Object discovery and configuration using ACSI services over TCP/IP
  - SCL import to configure objects and devices
  - Read/Write of any IEC 61850 object
  - Buffered and un-buffered reporting
  - Controls (direct, SBO, normal/enhanced security)
  - File Transfer client and server
- **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 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

## 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/DDE 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
- AX-S4 61850 functions and OPC applications can all be run concurrently on a single computer as a service or application process
- Each license good for a single computer with no device or tag limit on licensing
- Compatible with hundreds of OPC applications supporting OPC Data Access V3.0 and V2.05a

