

# ICCP Lite PLUS+

ICCP-TASE.2 Development Toolkit



## OVERVIEW

The Intercontrol Center Communications Protocol (ICCP) Lite PLUS+ is a portable source code implementation of IEC 60870-6 TASE.2. It enables the application or device developer to develop robust interoperable ICCP-TASE.2 applications and devices quickly using a field-proven implementation. ICCP Lite PLUS+ provides everything needed to build ICCP-TASE.2 interfaces for large SCADA/EMS/DMS and demand aggregation applications. Yet, it is efficient enough to scale down to a compact interface in a RTU or data concentrator for embedded applications.

The ICCP standard is specifically designed for the efficient exchange of real-time data and control information between:

- Enterprises
- Control center to control center communications in support of transmission system stability
- Power plant dispatching
- SCADA/EMS interface to data historians and other internal systems
- Demand response signaling

## BENEFITS

- Readily available and widely used
- Regular updates and improvements
- Extensively tested
- Easy-to-use code, sample applications, training and support provided
- Maximum performance with minimal CPU and memory requirements
- ANSI C source code provided to facilitate portation to virtually any environment
- Flexible licensing options



## KEY PERFORMANCE FEATURES

- Client and server implementation for ICCP Conformance Blocks 1, 2, 3, 4, and 5
- Supports V1996-08 and V2000-08 including millisecond timestamps and "All Changes Reported"
- Single application process support for efficient operation in embedded environments
- Multiple application process stack supported for flexibility and scalability in host computer environments
- Auto data value discovery and auto Data Set and Data Set Transfer Set configuration functions
- Dual local redundancy supporting automatic or manual failover with data and configuration synchronization between primary and backup nodes
- Support for triple quad redundancy of remote systems
- Optional non-secure "fall-back" mode to maintain data exchange
- XML based configuration with GUI in executable code form
- Scalable (tested to 1000 associations)
- Comprehensive global product support and maintenance

## COMPLIANCE TO IEC STANDARDS

- Portable to any operating system supporting ANSI C compiler
- Editions 1, 2 and 3 of IEC 60870-6 parts 802, 503 and 702 Telecontrol Application Service Element Number 2 (TASE.2) supporting TCP/IP profile
- Secure ICCP profiles supported per IEC 62351-4 based on OpenSSL (OpenSSL not included):
  - Strong application authentication with 1024/2048 bit signatures using X.509 digital certificates
  - Transport Layer Security (TLS) with 1024/2048 bit asymmetric keys and up to 256 bit symmetric key using automatic symmetric key renegotiation
- Includes SISCO's MMS Lite product supporting IEC 61850 parts 6, 7-2, 7-3, 7-4, 8-1, 9-2, 7-410, 7-410 and IEC 61400-25-2