

## RTU Training

# Advanced TELEGYR 5700 Mapping Course

The Advanced RTU training course is intended for experienced TELEGYR 5700 users to focus on the mapping requirements of additional protocols such as DNP, Modbus, etc. Another possible course topic is Programmable Logic Controller (PLC) mapping. This course topic provides mapping exercises using the ISaGRAF PLC engine.

**Customization Option:** *The Advanced RTU training course can be customized for other course topics. Please contact the factory for additional information. Course duration and pricing vary based on protocol / IED selection. For non-standard protocols or certain IEDs, an additional course preparation fee may apply.*

### General Information

Course Code: RTU002  
Length: 2 Day

### Audience

- The training is intended for protective relay engineers, designers and technicians from electric utilities and the industrial section who have TELEGRY 5700 experience.

### Prerequisites

- TELEGYR 5700 Basic Training Course or working experience using the TELEGYR 5700
- Working knowledge of the protocols and IEDs covered in the course
- Working knowledge of PLC programming techniques including ladder logic

### Goals

*Upon completion of this course, the students shall be able to:*

- Perform all mapping tasks necessary to map the covered protocols for both Server and Client applications.
- Parameterize the RTU as a protocol converter using TELEGYR CMP to connect specific IEDs.
- Map hardware / IED points with the PLC engine (when that topic has been selected).

### Topics

- Review of TELEGYR 5700 Software Structure and Mapping
- Configuration Management Program (CMP)
  - Set-up and use of CMP
  - Operation of the CMP program - constructing a RTU Map
- Specific Mapping Requirements for Selected Protocols
- Specific Mapping Requirements for the IS-aGRAF PLC engine.
  - Mapping local I/O for use by PLC programs
  - Mapping IED data for use in PLC programs
  - Using the PLC program to scale and process data to be reported in different data formats.
- Operation of the Maintenance Keypad
  - Hands-on Lab time - "Mapping the RTU using the Maintenance Panel"
- Examples and hands-on exercises for mapping of Clients and Servers

Note:

This course can be customized to cover two topics from the following list of topics:

- DNP protocol
- Modbus protocol
- IEC 870-5-101 protocol
- Programmable Logic Controller (PLC) mapping

Other protocols or IED interfaces may be available for an additional course preparation fee.