

RTU560

IEC 61850 Client and Server

Cost-efficient solutions for new installations, retrofit and partial upgrades in existing stations. The RTU560 combines the IEC 61850 station bus, direct in- and outputs and serial connected IEDs.



An introduction into the IEC 61850 world

The RTU560 offers the IEC 61850 client and server functionality. Therefore the RTU560 is the ideal solution for various applications:

- As gateway to interface the IEC 61850 station bus through a variety of modern plus third party communication protocols with different control centers
- To integrate existing in- and outputs into the IEC 61850 station bus
- To connect serial IEDs to the IEC 61850 station bus
- By supporting GOOSE, an implementation as a field RTU with data exchange to other IEC 61850 devices is possible

The RTU560 fits perfectly for the migration of existing system architectures to the IEC 61850 station bus. Therefore, an entry into the IEC 61850 world is very easy at any time.

Your benefits:

- Cost savings by retrofit and further use of existing installations
- Flexible solution for connecting direct in- and outputs to the IEC 61850 station bus
- Integration into existing system architectures
- Step by step migration of existing substations to the IEC 61850 station bus
- Integration of third-party IEDs
- Reduced engineering costs
- Secure investment

RTU560 with IEC 61850 Client and Server

The IEC 61850 server functionality of the RTU560 opens up a new application area. With this functionality not only data from direct in- and outputs can be provided but also data from IEDs which don't support the IEC 61850 station bus.

All data can be described in an IEC 61850 data model with the RTU560. Hereby the selection of components for different tasks in the station, e.g. Human Machine Interface, is independent of the manufacturer.

RTU560 with IEC 61850 Client and integrated Human Machine Interface

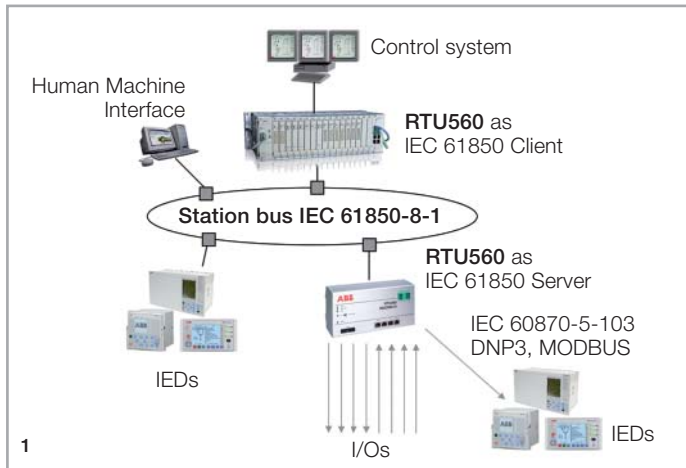
RTU560 is the ideal gateway to the control center through the implementation of the IEC 61850 client. The RTU560 allows the combination of traditional protocols like IEC 60870-5-103 and the IEC 61850 station bus. The acquisition of parallel in- and outputs, PLC and archive functions complete the portfolio. For local monitoring and controlling the RTU560 offers an integrated Human Machine Interface. The integration of these functions permits significant cost reduction. The modular architecture of the RTU makes it possible to upgrade to the IEC 61850 station bus at any time.

The engineering tool "RTUtil"

The engineering tool "RTUtil" of the RTU560 is completely embedded into the IEC 61850 engineering environment. A data model with the configuration of the RTU560 can be designed with "RTUtil". Furthermore with this information an IID-file (Instantiated IED Description) can be created which can be imported into the CCT (Communication Configuration Tool). The SCD-file (System Configuration Description) which is created by the CCT can then be imported again into "RTUtil" to complete the engineering process.

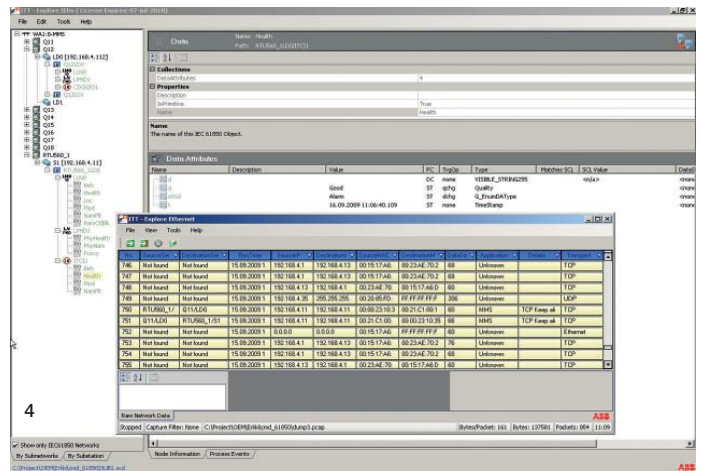
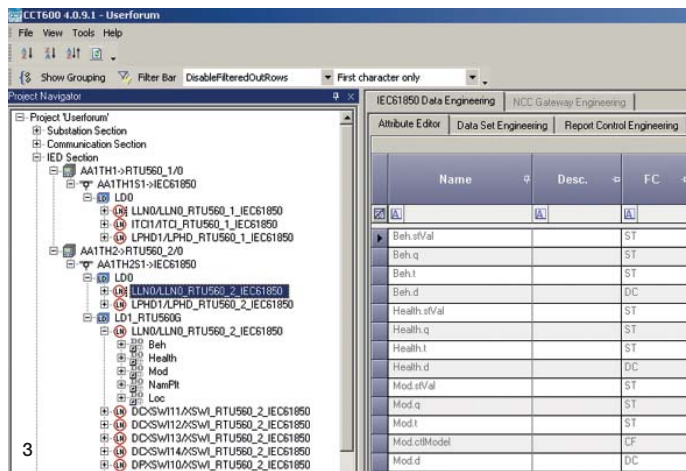
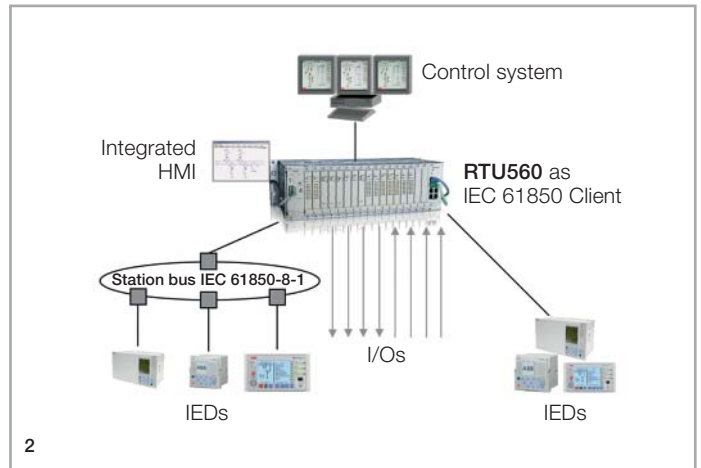
"RTUtil 61850" (CCT600)

For the configuration of the complete system and to create the SCD files the "RTUtil61850" can be used.



The test tool "ITT SA Explorer"

The tool "ITT SA Explorer" is part of the tool portfolio of the RTU560. It is used to analyze IEDs and the communication between them. The data exchange including GOOSE messages is displayed in clear text by the "ITT SA Explorer". The "ITT SA Explorer" is the fundamental tool to commission and test IEC 61850 systems. An additional function is the comparison of SCD configurations with the engineered data of connected devices.



1 RTU560 with IEC 61850 Client and Server with external Human Machine Interface | 2 RTU560 with IEC 61850 Client with integrated Human Machine Interface | 3 "RTUtil 61850" (CCT600) | 4 Test tool "ITT SA Explorer"

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