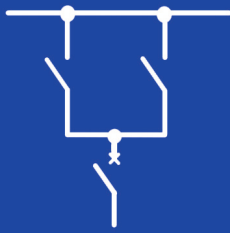


Process Simulation



IPS-20

The IPS is based on a modular hardware concept that allows it to flexibly implement a range of user requirements. The number of inputs and outputs, the voltage to be processed and the connection technology can be freely selected. The flexible operating software allows messages and commands to be observed and specified at different levels of abstraction. Reaction patterns characteristic of the process are stored in the operating software and executed autonomously with high temporal resolution.



IPS-20

Interactive testing and simulation system.
Control technology testing using bay simulation.

Test and simulation systems provide valuable services for the efficient testing of substation automation technology. In particular, simulating the real high-voltage substation at its process interfaces makes it possible to create reliable, reproducible test conditions. Based on the IEC 61850-6 standard, engineering tools can be used to model the substation's information technology. The result is a standard-compliant database for the substation automation technology's system design.



The interactive testing and simulation system (IPS) realizes the combination of testing and modeling.

Appropriate use of the IEC 61850-6 compliant database provides the information needed to adapt the test system to different test tasks.

The interface between primary and secondary plant technology is usually designed with a copper parallel connection. To test this effectively and reliably, a powerful tool is needed — the IPS.

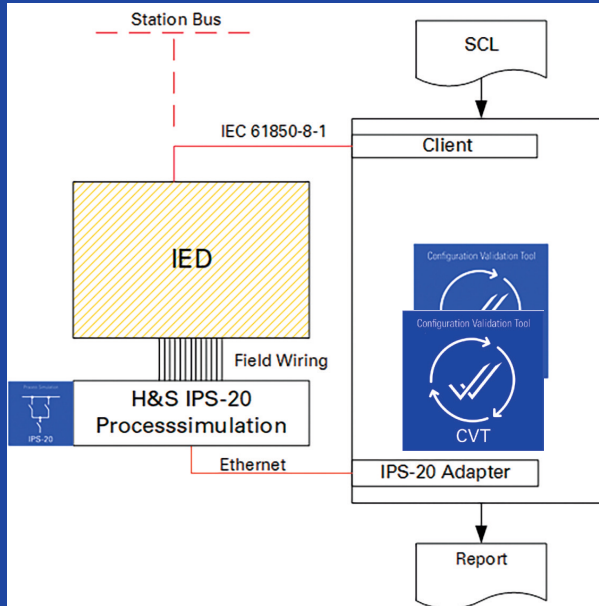
The IPS can be used to monitor and simulate the demanding electrical signals of substation automation technology..

 **H&S**

technologie

IPS MODULAR DESIGN

The IPS's modular concept allows several test devices to be managed in a network via a single user interface. Data models according to IEC 61850-6 are used directly to adapt the signal scope and reaction patterns of the test system to the respective test environment. This consistency continues when the IPS is integrated into the H&S Test Suite CVT in the sense of a coordinated system test. This ensures comprehensive testing from the control system to the process.



IPS-20



H & S Hard- & Software
Technologie GmbH Co. KG
Niedersachsenweg 10
44143 Dortmund



Jan Arph +49 231 / 5175-157
jarp@hstech.de
Patrick Peltzer +49 231 / 5175-161
ppeltzer@hstech.de