



MULTIFUNCTIONAL REFERENCE SETUP

MarsTest-61850

Purpose

MarsTest-61850: our mobile multifunctional reference setup generates and measures electrical signals within a substation. Unlike typical reference setups, MarsTest-61850 supports calibration of both conventional and 61850-9-2LE-compliant equipment.

Sphere of application

MarsTest-61850 is a solution for on-site testing and calibration of measurement channels in either conventional or digital substations.



Components of the system:

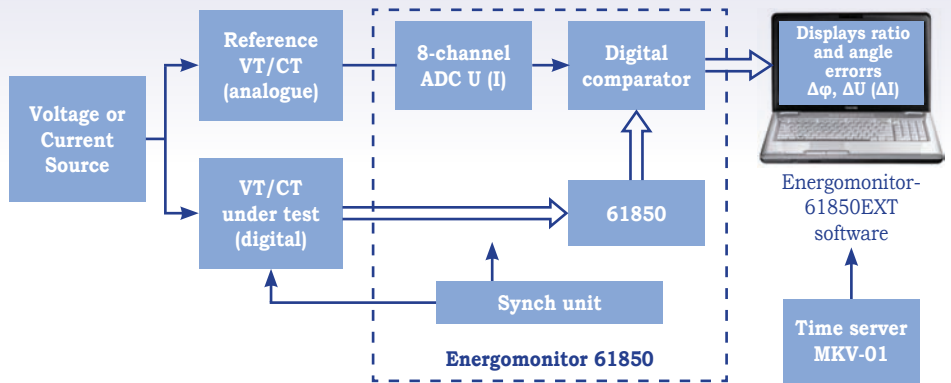
- ① *Energomonitor-61850* is a high-accuracy reference meter and comparator
- ② *Energoforma-61850* is a test signal/phantom power source that generates analogue test signals seamlessly adjustable in level and power
- ③ *MarsGen-61850* is a calibrator of 61850-9-2LE data streams that generates digital test signals seamlessly adjustable in level and power
- ④ Laptop based remote control terminal with *Energomonitor-61850ext* and *Energoforma-61850* software installed that controls the whole system and is responsible for displaying, processing and storing measurement results
- ⑤ External time server *MKV-01* provides synchronization with UTC

Calibrated equipment and test schemes

Voltage and current instrument transformers: conventional, electronic, and digital (61850-9-2LE)
Accuracy classes: 0.05–0.1 (or less accurate)



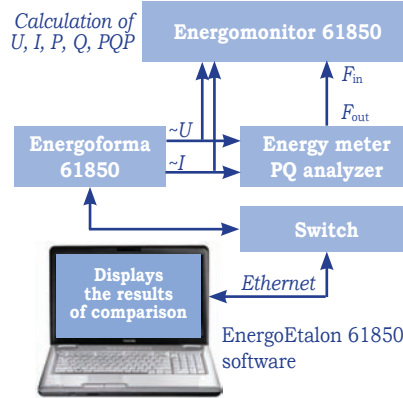
With digital outputs



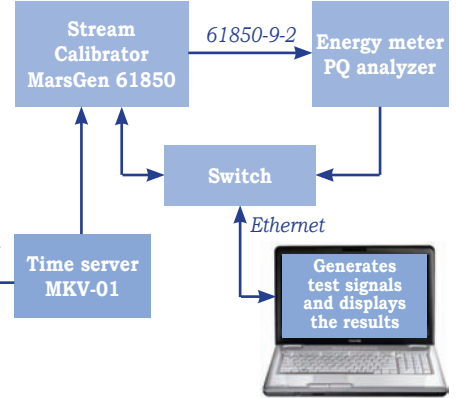
Class A PQ meters
Instruments for electrical measurements Electrical energy meters
Accuracy classes: 0.2S; 0.05–0.1 (or less accurate)



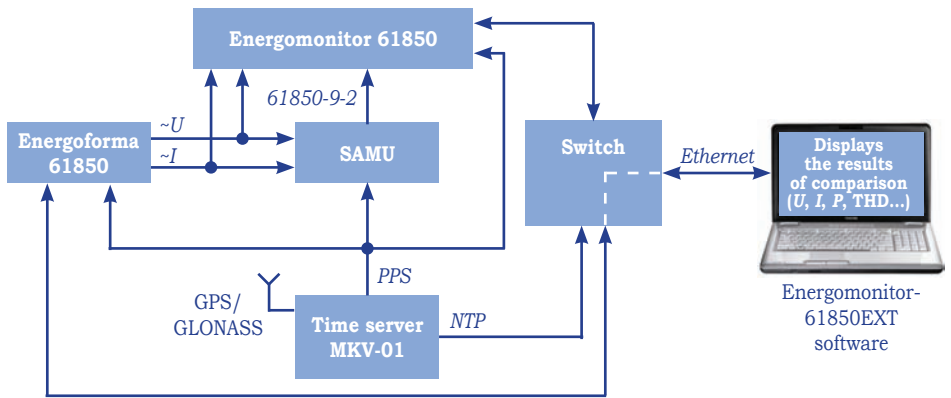
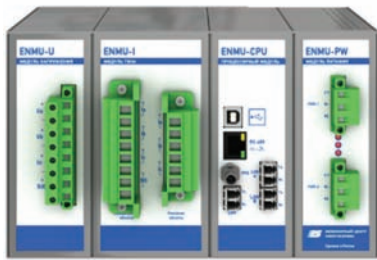
With analogue outputs



With digital outputs



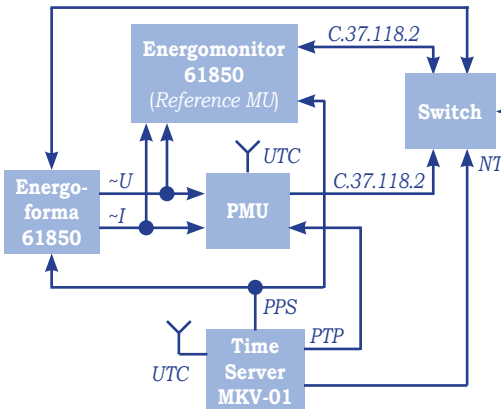
Standalone Merging Units (SAMU)



Phasor Measurement Units (PMU)



With analogue outputs



With digital outputs

