



PQA-SCADA

SERVER FOR POWER QUALITY ANALYZERS



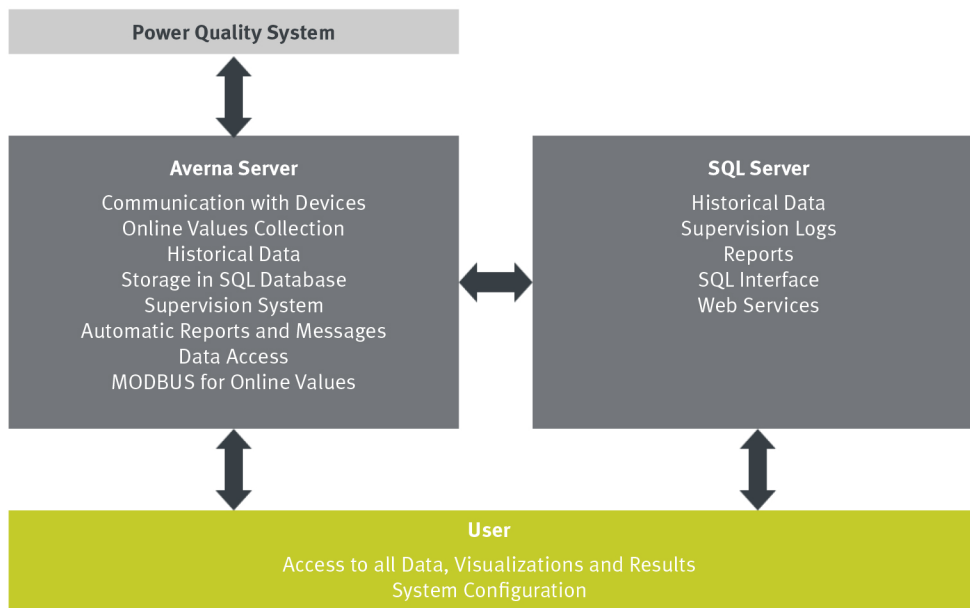
- ✓ Complete online and historical data
- ✓ Power quality evaluation acc. EN50160

- ✓ Real-time and historical display in multiple visualization panels
- ✓ On-premise solution or cloud service

PQA-SCADA delivers automatic readings of real-time and historical data from multiple power quality meters simultaneously. This powerful software can communicate with hundreds of meters, including third-party hardware.



→ Basic Overview



Main Features



AUTOMATIC READING OF REAL-TIME AND HISTORICAL DATA

Communication using device specific protocols and formats.

STORAGE OF ALL HISTORICAL DATA INTO SQL DATABASE

All historical data, protocols, supervision records, etc. are stored in the SQL database. Data is not encrypted, and it is also available to other users with sufficient user rights.

ON-LINE DATA

Real-Time Data is displayed in a table, graph, as V/f profile, vector spectra or on the map.
Users are able to view the last disturbance or transient (including waveform) for each measurement system. Values are represented for each phase as well as total values.

GEOGRAPHICAL VISUALIZATION

Users can view all substations/areas where analyzer(s) are installed. Each substation/area shows actual state based on actual voltage level (under/over voltage etc.). Supervision map indicates possible device fault condition.

REPORTS

Users can easily export every viewed panel to a PDF including basic measurement information. Automatic reports are also available to be configured for events (disturbances and transients).



Main Features

NOTIFICATIONS

Systems can send notifications automatically and add reports under certain circumstances. Sending may be triggered by the event on a device (voltage event, transient record detected) or by the supervision event.

EVENTS DETECTION

Automatically generated events list captured by the meter itself or captured by the Master Station (custom events):

- Alarm
- Voltage harmonic alarm
- Voltage alarm
- Transient
- Disturbance
- EN50160 event
- Custom event

SUPERVISION

The powerful supervisory management monitors each device status and its fault state. Supervision overview distinguishes between two states: OK and Failed. Available functions for monitoring are: ping, software running, data storage and data verification.

THIRD-PARTY COMPATIBILITY

PQA-SCADA can communicate and share data with other devices, including third-party hardware. Information is shared via web-service, SQL, MODBUS/TCP

→ Additional Features

EN50160 EVALUATION

The EN50160 Evaluation contains a table with statistical evaluation of all required measurements according to EN50160 standards for a selected time period (months or weeks).

HIERARCHICAL TREE VIEW OF ALL METERS (SUBSTATION, AREA ETC.)

User can search for a specific device either by expanding the tree structure to the desired level, or simply find device using the Device Search Box.

VIRTUAL ENERGY METER

Virtual energy meter is a special type of instrument in an application that consists only of a list of positive and negative real meters.

Its historical data (energy) can be viewed in the same way as if from a real device; the server automatically calculates the sum of positive and negative components.

The input and all outputs of the local network are monitored, the total balance (losses) can be displayed.

EN50160 GLOBAL EVALUATION DETAILS

Comprehensive overall power quality result across all meters/substations/regions and whole year in one screen. This visualization provides statistical evaluation of each 3-phase system/week result (pass/fail) over the whole grid. This quickly identifies the regions with weak power quality. The percentage of final PQ results (number of good/bad points) for each substation and region thru the whole year is displayed.

EVENTS (SUPERVISION)

PQA-SCADA uses “ping” command and awaits echo reply to determine whether the analyzer is accessible or not. The system also checks if software on the PQA analyzer is running, if data storing is enabled, if data from analyzer was copied to the database (including “database full” detection).

