**Tender text SINEAX AM3000**

****

**Transparent power quality and energy consumption monitoring**

The SINEAX AM3000 is a compact instrument for measuring and monitoring in power distribution systems. It excels in display quality and intuitive operation. The devices provide a wide range of functionalities which may even be extended by optional components.

The modern, multi-lingual design allows operating and parameterizing the device via website or the high-resolution color TFT display (800x480px). The integrated webserver provides remote acquisition, visualization and analysis of measured data. No additional software is required.

**Condition monitoring**

* Provision of all voltages, currents, powers, power factors every 10/12 cycles
* Extended reactive power analysis
* Variance of system variables with time reference

**Energy flow analysis**

* Power mean-values with trend-analysis for preventing load-peaks
* Load profile storage with fluctuation range (min/max) per interval
* Active energy class 0.2S, Reactive energy class 0.5S (HT/LT, demand/delivery), configurable resolution
* Further mean-values and meters with selectable base quantity

**Power quality analysis**

* Harmonic analysis acc. IEC 61000-4-7
* Assessment of voltage and current imbalance
* Phasor and phase sequence display for connection check
* Waveform display
* Optional disturbance recorder for PQ events (voltage dip, swell, interruption) acc. IEC 61000-4-30 Ed.3 with RMS1/2 and waveform recordings

**Hardware options**

Up to 4 modular extensions: Analog outputs ±20mA (2/4), Relay outputs (2), Digital inputs (4) active / passive, GPS time synchronization, Fault-current monitoring (residual or earth current), temperature monitoring (Pt100, PTC), IEC61850, Profinet I/O

**Communication**

* Ethernet (Modbus/TCP, http/https, NTP, SFTP, SYSLOG)
* Optional: IEC61850, Profinet I/O, Modbus/RTU
* Scheduled data export to SFTP server

**Security**

* Flexible Role Based Access Control
* Encrypted communication via HTTPS
* Audit Log records all security related procedures, support for SYSLOG for transfer to central network monitoring server
* Client whitelist: IP address list for restricting authorized computers
* Digital firmware signature: Prevents that manipulated firmware gets into the device via update

**Further features**

* 4 current and 4 voltage channels with 0.1% accuracy, direct measurement or via transformers
* Measurement category 600V, CAT III (voltage), 300V,CAT III (current)
* Optional UPS (5x3 minutes)
* Data logger with16 GB data memory (option)
* Sampling rate: 18kHz
* Monitoring and alarming via limit values and monitoring functions
* For panel mounting 144x144mm
* Identical operation as devices of the PQ/CU/DM series

**Manufacturer**

Camille Bauer Metrawatt AG

Aargauerstrasse 7

CH-5610 Wohlen

<https://www.camillebauer.com/>