POWER QUALITY ANALYZER iMC774

iMC774 is an important device **for permanent monitoring of power quality from its production (especially renewable), transmission, distribution to final consumers,** who are most affected by insufficient quality of voltage. Lack of information about the supplied quality of voltage can lead to unexplained production problems and malfunction or even damage to equipment used in the production process.

- The iMC774 can be used for utility purposes (evaluation against standards) as well as for industry purposes (monitoring supplied power quality).
- iMC774 performs measurements in compliance with regulatory requested standard EN 61000-4-30 and evaluates recorded parameters for analysis according to parameters defined in European supply quality standard EN 50160:2011.

- iMC774 stores measurements and quality reports in internal memory for further analysis over recorded measurements. By accessing recorded or real-time values from multiple instruments installed on different locations it is possible to gain the overall picture of systems' behaviour. This can be achieved with regard to iMC774 accurate internal real-time clock and wide range of synchronization sources support, which assure accurate, time-stamped measurements from dislocated units.

All required measurements, weekly PQ reports and alarms can also be stored locally in an internal memory. Stored data can be then transferred to a memory card or accessed through communication for post analysis.

- Features

- Evaluation of the electricity supply quality in compliance with EN 50160 with automatic report generation.
- Measurements of instantaneous values of more than 140 quantities including harmonics, flicker, power line signalling voltage, unbalance, etc..
- Class A (0.1%) accuracy in compliance with EN61000-4-30.
- Four quadrant energy measurement with class 0.2S for active energy, 8 programmable counters, up to four tariffs, tariff clock …
- Automatic range selection of 4 current and 4 voltage channels (max. 12.5 A and 1000 VRMS) with 32 kHz sampling rate.
- Recording all measured parameters including all voltage and current harmonics up to 65th, 32 adjustable alarms, anomalies and quality reports in the internal memory.
- Measurements of 40 minimal and maximal values in different time intervals (from 1 to 256 periods).
- Frequency range from 16 Hz to 400 Hz.
- Up to three independent communication ports (RS 232/485 up to 115,200 bit/s, Ethernet and USB 2.0).
- MODBUS, DNP3 and MQTT communication protocols.
- Support for GPS, IRIG-B (modulated and digital) and NTP real time synchronisation.
- Up to 20 inputs and outputs (analogue inputs/outputs, digital inputs/outputs, alarm/watchdog outputs, pulse input/outputs, tariff inputs).
- Multilingual support.
- Universal power supply (two voltage ranges).
- 144 mm square panel mounting.
- User-friendly setting and evaluation software, MiQen.