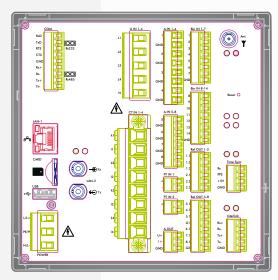
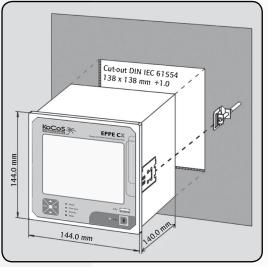
### INSTALLATION

**EPPE CX** is designed for panel mounting. A bracket system for DIN-rail mounting is available as an optional extra.

The standard wide-range power supply unit allows flexible powering. It is also possible for the device to be equipped with various different DC power supply units. A completely maintenance-free internal emergency power supply provides backup should there be a shortterm interruption to the voltage supply.





# **TECHNICAL DATA**

Display	5" TFT graphic touch screen 640 x 480 pixels with backlighting
Operation	Membrane keypad on the front panel and touch screen
Memory	2 GB flash (replaceable)
Synchronisation	GPS, DCF, NTP, IRIG-B, Sync Bus
Interfaces	1 x RS 232, 1 x RS 485, 3 x USB (2 x active, 1 x passive), 1 x Ethernet optional: optical Ethernet (FO)
Supply voltage	AC 85265 V, 4763 Hz DC 90350 V optional: DC 972 V
Inputs	1.) 4 x voltage, 4 x current 2.) 8 x voltage optional: 10 x sensor (incl. 2 x temperature)
Outputs	1 x process output (U/I)
Binary inputs	14 (2 groups)
Binary outputs	2 x relay outputs 6 x electronic outputs
Housing	For panel mounting Protection IP 52 Dimensions 144x144x140 mm
Standards	EN 50160 IEC 61000-4-7 IEC 61000-4-15 IEC 61000-4-30 class A

For more detailed information, go to:



KoCoS Messtechnik AG Südring 42 34497 Korbach, Germany Tel. +49 5631 9596-40 info@kocos.com



# **EPPE** CX Power Quality Analyser

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Technical specifications subject to change without prior notice | 201602 | © KoCoS Messtechnik AG



- Sensor measurement inputs
- Innovative touch screen
- Integrated fault recorder
- Measurement to EN 50160
- Energy meter

www.kocos.com

**IEC 61850** 

Multi-functional measurement and analysis system for comprehensive monitoring of electrical installations at all voltage levels.

The combination of fully automatic, continuous measurements and easy operation ensures that detailed and informative analysis can be delivered across a wide range of applications.



## APPLICATION

**EPPE CX** can be tailored to meet the individual needs and requirements of the user. Various different types of signal inputs for voltages and currents as well as optional sensor inputs and outputs make the device extremely flexible to use. The applications listed below are given as examples of the wide range of different uses of the device:

- Power quality analysis
- Power quality monitoring
- Differential current measurement
- Fault analysis
- Generator monitoring
- Recording and identification of power swings
- Measurement of harmonics
- Monitoring and analysis of renewable power systems
- Network optimisation
- Load management
- Monitoring to EN 50160
- Fault location
- Trend recording
- Critical load monitoring
- Consumption measurements, e.g. for load optimisation

## SENSOR TECHNOLOGY

One process output and various sensor inputs for measurement quantities such as temperature, light irradiation, rotational vibration, wind speed or wind direction make it possible to monitor and analyse renewable power systems or industrial plants, to mention just two examples.

#### **ENERGY METER**

Power consumption can be monitored using the built-in energy meter with accuracy class 0.2S and optimised with the aid of long-term trend analysis.

# TIME SYNCHRONISATION



Power quality analysis and fault analysis with full area coverage call for precise time synchronisation. **EPPE CX** can be synchronized with GPS, IRIG-B, DCF or NTP, i.e. all the usual methods of time synchronisation are available.

## **MEASUREMENT FUNCTIONS**

The following functions guarantee full monitoring and analysis of electrical installations:

- Uninterrupted recording of all network parameters with an adjustable averaging period (trend analysis, EN 50160)
- Event recording with configurable trigger criteria for exact observation of network disturbances
- RMS recorder for detecting and assessing slow processes such as power swings or for generator monitoring
- High-resolution fault records for detailed fault analysis
- Sensor inputs for the specific purpose of monitoring renewable power systems and industrial plants
- Energy meter for monitoring and optimising power consumption
- Logical functions for checking and monitoring electrical installations easily

# **TOUCH SCREEN**

The colour 5" touch screen display has a clear, ergonomic design for simple, intuitive operation.

#### **EVALUATION**

A detailed analysis of the measurement data can be carried out with powerful analysis software on a PC. A wide range of graphs and tables, automatic reports and export functions as well as numerous analysis tools simplify the precise evaluation of the measurement data.

#### COMMUNICATION

The integrated dual processor system with two separate processors for the user interface and for the communication interfaces guarantees user-friendly operation, fast data transfer and easy integration into any network at all times. Communication can take place via the following interfaces:

- Electric Ethernet
- Optical Ethernet (optical fibre)
- Active/passive USB
- RS485 / RS232

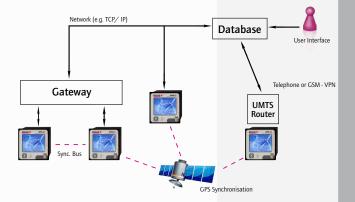
A connection capability for LTE/UMTS routers supplied with power via the measuring device simplifies data download via the mobile network. This means that data can be conveniently transferred to a PC and evaluated, even over long distances and during a measurement. **EPPE CX** also supports communication protocols such as IEC 61850 and Modbus.

#### DATA TRANSFER VIA USB FLASH DRIVE

Parameters can be transferred directly to the device with a USB flash drive. When no direct communication connection is available, measurement data can also be transferred quickly and easily to a USB flash drive.

#### WEB SERVER

The integrated WEB SERVER enables users to access all relevant measurement data with any Internet browser.



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