#### Installation

The rugged carrying case protects the measuring device against dust and water, even in harsh environmental conditions. Holes for a padlock make it possible to secure the system when measurements are made in public areas.

A wide range of accessories simplifies various different measurement tasks:





Claw clips



Terminal adapters



Accessory case, outdoor

# **Technical data**

Display	7" colour graphical touch screen
	with backlighting
Operation	Membrane keypad on the front
	panel and touch screen
Memory	Min. 2 GB flash
Synchronisation	GPS, DCF, NTP, Sync Bus
Interfaces	1 x Ethernet
	2 x USB (active, passive)
Supply voltage	External: AC 100240 V
	(DC 100350 V), 4763 Hz
	Internal: DC 918 V
Inputs	4 x voltage inputs
	4 x direct inputs for current
	measurement
	4 x current sensor inputs
	4 x sensor inputs
	1 x temperature input
Outputs	1 x process output (U)
Binary inputs	8 (2 groups)
Binary outputs	2 x relay outputs
Housing	Carrying case
	424 x 340 x 173 mm (W x H x D)
	IP65 protection class (closed)
Overvoltage category	CAT IV
Standards	EN 50160
	IEC 61000-4-7
	IEC 61000-4-15
	IEC 61000-4-30 class A

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# Portable power quality analyser and fault recorder

Powerful, multi-functional measurement and analysis system for comprehensive and precise monitoring of electrical installations.

- Sensor measurement inputs
- Direct inputs for current measurement
- Galvanic isolation of all current and voltage inputs
- Innovative 7" graphical touch screen
- Online monitors, status displays and evaluation options can be accessed directly on the device itself
- Connection capability for LTE/UMTS router
- Integrated fault recorder
- Safety class CAT IV

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**EPPE** PX has been specially developed as a portable solution for measurements and installation monitoring. The measuring device and accessories comply with CAT IV, this guarantees that they meet stringent occupational health and safety requirements.

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
- Generator monitoring
- Recording and identification of power swings
- Digital fault recorder with a high sampling frequency for detailed analysis of transient faults
- Measurement of harmonics
- Monitoring and analysis of renewable power systems
- Network optimisation and load management
- Monitoring to EN 50160
- Fault location
- Trend recording
- Analysis of machinery start-ups
- Critical load monitoring
- Consumption measurements, e.g. for load optimisation

#### Inputs and output

The galvanically isolated voltage inputs make it possible to carry out complex fault recorder measurement applications. Current sensor inputs, direct inputs for current measurement and sensor inputs for measuring properties such as temperature, light irradiation, rotational vibration, wind speed or wind direction make the device extremely flexible to use. Measurement functions

The following functions guarantee precise measurements and comprehensive 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 7" colour graphical touch screen enables the device to be operated simply and intuitively. Limit value violations and fault records can be displayed and analysed directly on the screen, allowing on-site analysis without a PC.



## **Time synchronisation**

Detailed power quality analysis and fault analysis call for precise time synchronization. EPPE PX can be synchronized with GPS, DCF or NTP.



### Communication

The integrated dual processor system with two separate processors for the user interface and for the communication interfaces guarantees fast data transfer.

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

#### **Mobile network**

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.

## 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.

## Evaluation

In addition to evaluation on the device itself, 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.

#### **Emergency power supply**

A completely maintenance-free internal emergency power supply provides backup should there be a short-term interruption to the voltage supply. Appropriately dimensioned power banks can be used to operate EPPE PX over periods of several hours without a power supply.

