



PQ-Box Trade-In Promotion: October 1 - December 31, 2026
For a Limited Time: Receive an Attractive Discount for the Trade-in of Your PQ-Box 100 or Comparable Third-party Device (3-Phase Power Quality Analyzer From a Third-Party Supplier)

We are constantly working to ensure that our power quality analyzers are ahead of their time.
From October 1 to December 31, 2026, our limited-time PQ-Box Trade-In Promotion offers an attractive discount when you trade in an A. Eberle PQ-Box 100 or comparable third-party device (3-Phase Power Quality Analyzer From a Third-Party Supplier).

Trade-In Discounts for an Old Device:

- Trade-in of an old device* and purchase of PQ-Box 150 Light/Expert: 500 €**
- Trade-in of an old device* and purchase of PQ-Box 200: 600 €**
- Trade-in of an old device* and purchase of PQ-Box 300: 750 €** or PQ-Box ONE

* Old device: PQ-Box 100 or 3-phase power quality analyzer from a third-party supplier
** Discount applies to the net price of the PQ-Box, excluding taxes and shipping. PQ-Box ONE and PQ-Box 50 are excluded from the promotion.

Win a PQ-Box ONE!

The most creative submitted old-device photos will be put to a social media vote. The winner receives a free PQ-Box ONE.



Here’s how it works:

The steps to receive your PQ-Box Trade-In Promotion discount are simple:

1. Send your order (quantity and desired PQ-Box models) to your sales contact.
Find your contact at www.a-eberle.de/en/contact/sales-international. Mention that you are taking part in the PQ-Box Trade-In Promotion. If needed, contact sales@a-eberle.de.
2. Old devices do not need to be sent to us. Send two photos for each old device with your order: a photo of the nameplate and clear proof of destruction (e.g., a destroyed display, cut measurement cables, or a drilled hole through the device).
3. The discount will be applied to your order. You will receive the invoice with the discount already applied from your sales contact.

You can trade in one old device for each new A. Eberle PQ-Box 150/200/300 purchased. If you order several new PQ-Boxes and would like to trade in several old devices, please submit with your order both required photos for each old device (clear proof of destruction and a photo of the nameplate).

Questions about the PQ-Box Trade-In Promotion? Contact your sales representative or sales@a-eberle.de.

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More info: www.a-eberle.de/trade-in-promotion



Measure. Regulate. Across All Grids.



10 Reasons to Choose a Latest-Generation PQ-Box

01. Higher Sampling Rate of the Power Quality Analyzer - Troubleshooting in Frequency Ranges up to 170 kHz

New power electronic loads and energy generators cause grid disturbances at increasingly higher frequencies. Their switching frequency depends on power rating. In the > 30 kW to MW range, it is approximately 2.5 kHz to 8 kHz and significantly higher at lower power levels.

Solar inverters typically switch at 16 kHz to 18 kHz, while EV charging stations generate disturbances between 10 kHz and 80 kHz. According to the Nyquist-Shannon sampling theorem, a power quality analyzer must sample at least twice the frequency to be captured. Detecting disturbances from a solar inverter therefore requires at least 40 kHz.

As a result, grid disturbances in the frequency range from 2 kHz to 150 kHz are continuously increasing due to the growing use of power electronics. Power quality standards for public and industrial grids already specify limit values up to 150 kHz, for example IEC 61000-2-2 for public low-voltage grids and IEC 61000-2-4 for industrial grids.

02. Standards-Compliant Measurement According to IEC 61000-4-7 from 2 kHz to 9 kHz

The frequency range covered by compatibility levels has been extended in many current standards. The application guidelines VDE AR 4100, 4110 and 4120 for customer installations in low-, medium- and high-voltage grids now include limits up to 9 kHz for voltages and currents. The latest generation of A. Eberle PQ-Boxes provides these values in compliance with the relevant standards. The current D/A/CH/CZ guideline also includes limits up to 9 kHz. With the current version of the WinPQ mobil power quality analysis software, users can create complete measurement reports „at the touch of a button“ using pre-installed standards-based evaluation templates in accordance with common standards and guidelines.

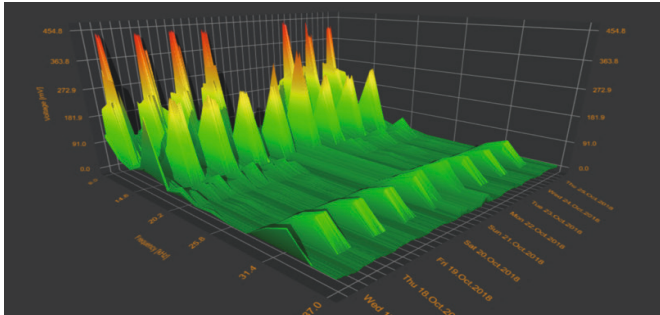


Figure 3: FFT spectrum of the PQ-Box 300 – one week 3D- visualization of supraharmonics up to 300 kHz

04. Wider Selection of Measured Values

While the PQ-Box 100 was already able to record many different measured values continuously and in parallel, the latest generation of devices calculates more than 5,000 measured values with the PQ-Box 150 and up to 20,000 measured values with the PQ-Box 300 in parallel during each measurement. These include, for example, active and reactive power for all harmonics as well as their phase angles and direction, helping to identify the sources of these disturbances. In addition, the devices cover the supraharmonic frequency range up to 150 kHz. Older devices from other manufacturers as well as the PQ-Box 100 are unable to detect many of today's disturbance phenomena.



Figure 5: Detection of supraharmonics up to 150 kHz in 200 Hz bands (PQ-Box 300)

06. Communication Options with a PQ-Box

Remote access allows users to check how a measurement is progressing and whether enough events have occurred or the device can already be removed. With a PQ-Box, this is possible using a 4G/5G wireless modem connected via the power quality analyzer interface. All devices of the latest PQ-Box generation feature a WLAN interface and can be operated wirelessly via PC or smartphone. This allows a PQ-Box to be operated in a locked room or outdoors at a pole-mounted substation without a cable connection.

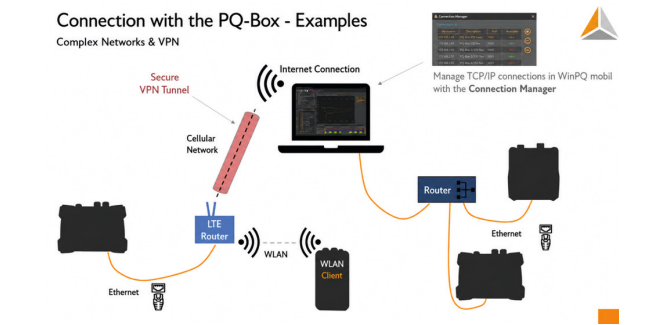


Figure 6: Overview of all PQ-Box-to-PC communication options

08. A Flexibly Configurable AUX Input or 5th Current Input

A flexibly configurable AUX input or 5th current input expands PQ-Box applications. On the PQ-Box 200 and PQ-Box 300, a temperature sensor can record temperature in a switch cabinet or at a transformer alongside the power quality measurement. Residual current at an RCD or PE conductor current on a grounding strap can also be measured. A trigger threshold can be set for the 5th input, and the measured value can be captured by the high-speed recorders during a disturbance.



Figure 9: Fast switching transients in an industrial installation, measured with a PQ-Box 200

09. Measuring Fast Switching Transients

Fast switching transients are common in industrial applications. Capturing these extremely fast events requires a high sampling frequency and large measuring range. The PQ-Box 200 is specifically designed for this purpose, sampling at 4 MHz with a measuring range of +5 kV/-5 kV.

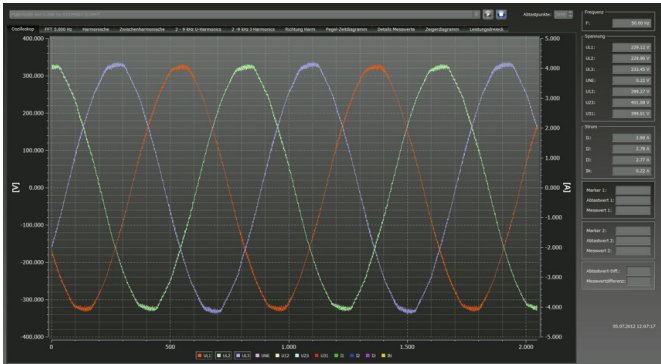


Figure 1: Example of grid disturbances from a solar installation measured with a PQ-Box 200 (40 kHz)

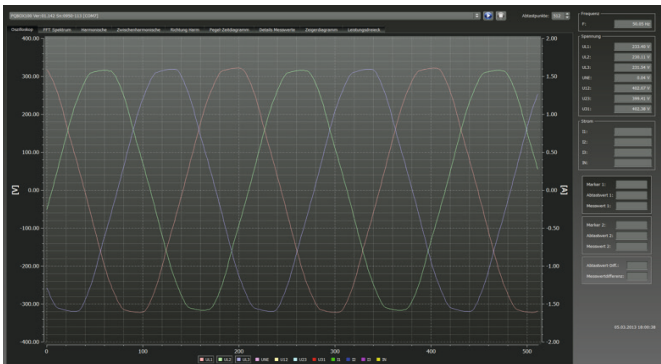


Figure 2: PQ-Box 100 (10 kHz) at the same measurement point - the old PQ-Box 100 cannot detect the disturbance signal.

03. Changes to IEC 61000-4-30

IEC 61000-4-30 Ed. 4 (2026 edition) has been significantly expanded. The PQ-Box 100 and older third-party devices were developed according to an earlier edition, while the latest generation (PQ-Box 50/150/200/300) already fully complies with Edition 4 requirements for Class A reference measuring instruments. This prepares users for current and future requirements.

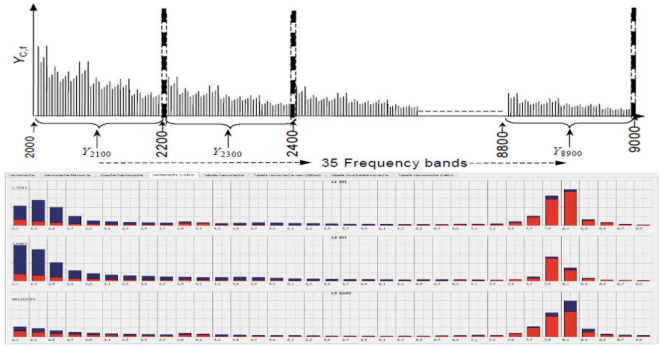


Figure 4: Grouping method for voltage and current harmonics from 2 kHz to 9 kHz according to the standard, using the WinPQ mobil power quality analysis software

05. Significantly Expanded Technical Specifications

- Battery: PQ-Box 100: approximately 30 seconds vs. PQ-Box 150: 4 hours, providing backup during power failures and supply interruptions.
- Memory: The storage capacity for measurement data has been expanded to 32 GB as standard for the PQ-Box 150/200/300.
- Display: On the PQ-Box 150/200/300, a graphical color display replaces the monochrome display of the PQ-Box 100 and older devices. Phasor diagrams and oscilloscope views can be displayed directly, making connection errors easy to identify. The larger display and operating buttons also simplify device parameterization and operation.
- Password protection: The PQ-Box can be protected by password against unauthorized use.



Figure 7: Overview of the extensive functions of the free PQ-Box App for Android and iOS

07. PQ-Box App

A free app for Android and iOS is also available, allowing you to parameterize your PQ-Box and display extensive live measurement data on any smartphone.

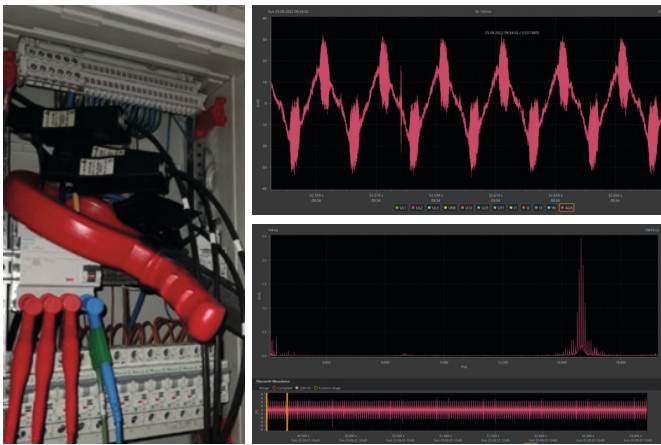


Figure 8: Measurement of residual current at an RCD, including analysis of the fundamental component and supraharmonic currents

10. Intuitive Operation & Analysis Software for a Smooth Transition

The PQ-Box 150, PQ-Box 200 and PQ-Box 300 share a consistent user interface. Intuitive menu navigation enables users to get started quickly and simplifies switching between PQ-Box models or transitioning from devices made by other manufacturers.

In addition, WinPQ mobil provides powerful and user-friendly analysis software for convenient evaluation, visualization and documentation of measurement data.