

# Where power meets precision

## PX8000 Precision Power Scope

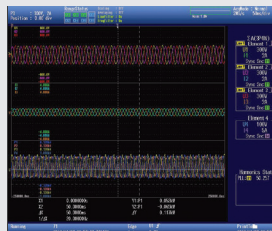
# Precision Making

The PX8000 is the world's first precision power scope, bringing oscilloscope-style time-based measurement to the world of power measurement.

The PX8000's time-based accuracy brings a new dimension to power analysis. It can capture voltage and current waveforms precisely, opening up applications and solutions for a huge variety of emerging power measurement problems.

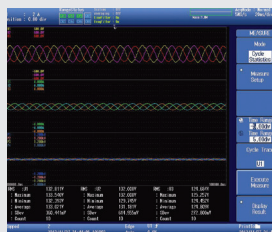
The PX8000 brings together Yokogawa's world-leading expertise in power measurement with our long heritage in oscilloscope design to deliver a true test and measurement revolution.

### Transient power measurement and analysis



#### Specific time-period measurement

The PX8000 supports the capture of power waveforms over specific periods of time through the definition of start and stop "cursors." This is particularly useful for examining transient phenomena and in the design of periodically controlled equipment. To ensure that equipment such as photocopiers complies with energy standards, for instance, it is vital to measure power consumption across a range of different modes from "sleep" to full activity – and all the transient states in between.



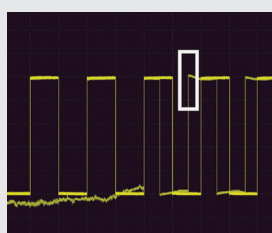
#### Cycle-by-cycle power trend measurement

Trend measurements between waveforms can be calculated by mathematical functions (up to four million points). The voltage, current and power waveforms can be inspected for specific numerical values at any point and averages can be calculated. Such capabilities are particularly important when analyzing and optimizing the performance of, for instance, lighting and electric motors at start-up.



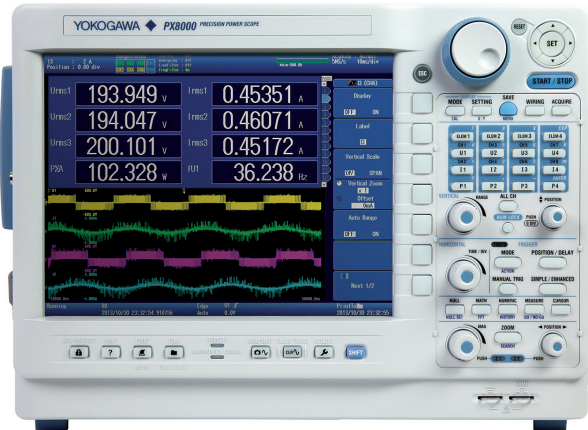
#### Simultaneous harmonic measurement

The PX8000 makes it possible to simultaneously measure the harmonic components of voltage and current waves as well as the harmonic distortion factor. Harmonics up to the 500th order of the fundamental can be measured.



#### Capturing sudden or irregular phenomena

Abnormal phenomena discovered during repeated high-frequency measurements can often be hard to isolate, disappearing from the screen almost as soon as they appear. The PX8000 has an always-active History function that automatically records up to 1,000 historical waveforms. These waveforms can be recalled and redisplayed at any time. They can also be used to redefine trigger conditions.



## Key applications

The PX8000 is an immensely versatile instrument, unlocking precision power measurement capabilities for researchers working on everything from renewable power to advanced robotics. Anywhere that power consumption is at a premium – which means almost anywhere power is consumed – can benefit from the introduction of the PX8000's precision measurement and analysis capabilities.

## Key application areas include

- Inverter and motor testing
- Inverter boost circuit – reactor loss measurement
- Transient responses of industrial robots
- Wireless charger efficiency measurement
- Power distribution – load switching and short circuit
- Transient power measurement of multi-function machine
- Inrush current of ballast
- Inverter driven cooking plate/microwave
- Power consumption analysis in home appliance & office equipment's
- Evaluation of inverter controlled elevators
- Evaluation of magnetic components

## The PX8000 has three different modules



### 1 Voltage module

### 2 Current module

Power measurement element includes voltage and current module (up to four power elements)

### 3 Auxiliary (AUX) module

Sensor and voltage measurement module (up to three modules can be installed)

## The PX8000 delivers:

**Insight** – Precision power measurement gives true insights into energy consumption and performance.

**Confidence** – Proven, high-quality production means the PX8000 can be relied upon to deliver over extended periods of time.

**Familiarity** – Users experience a short learning curve thanks to features familiar to anyone who's used to power measurements or oscilloscopes.

## 3 Year Warranty

The quality and reliability of a Precision Power Scope is supported by a standard 3 year warranty

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