

# Fluke VR1710 Voltage Quality Recorder



The Fluke VR1710 is a single-phase, plug-in voltage quality recorder. An extremely easy-to-use solution for detecting and recording voltage quality problems, it allows for immediate action and less downtime. The Fluke VR1710 satisfies the needs of maintenance and facilities management personnel in industrial, utilities, and large service organizations where reliable voltage quality is essential to the operation of the business. Voltage quality parameters including RMS average, transients, flicker, and harmonics up to the 32<sup>nd</sup> are recorded using a user-selected average period from 3 seconds to 10 minutes.

- **Fast and easy recording of voltage trends, dropouts, and power quality** – Easily pinpoint the root cause of voltage problems
- **Extremely easy to use** – Plug directly into the mains power socket and record
- **Continuous recording of all values with no gaps** – Save testing time by getting the whole picture with one instrument that records both events and voltage
- **Clear graphical summary of data and quick overview of key power quality parameters** – Take the guesswork out of diagnosing voltage quality problems
- **Min, Max, Average RMS values (1/4 cycle) with time stamps** – quickly see what happened and when
- **Actual transient display (>100 µs) with time stamp** – Quickly identify issues with included graphical software
- **Flicker according to EN 61000-4-15, individual harmonic and THD values with trends** – Easily identify if the problem is power quality or equipment related
- **Statistical analysis of voltage event** – reduces analysis time by tracking event quantities and magnitudes
- **Includes PowerLog software package for quick download, analysis, and automatic reporting** – Save time by generating reports automatically with pre-set templates

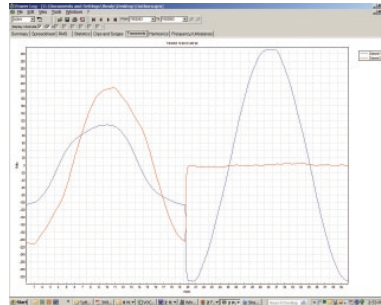
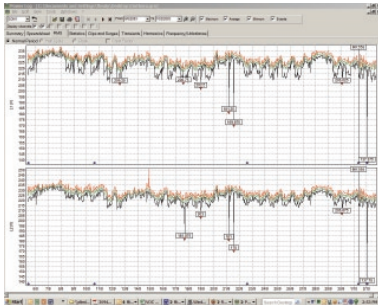
## Applications

- **Voltage recording** – monitors and records supply voltage; measures RMS average, minimum and maximum values, and checks whether the socket outlet is providing voltage within tolerance.
- **Distortion measurement** – measure frequency and harmonics; check whether the distorting loads (UPS systems, drives, etc.) are affecting your other equipment.
- **Flicker measurement** – quantify the affects of switching loads on lighting systems.
- **Capture voltage transients** – capture those intermittent, momentary events that may be affecting your equipment; the full waveform is captured with date, timestamp, and duration.

## General specifications

Features	Fluke VR1710
Operating voltage	70 V to 300 V
Min/Max/Avg RMS value	Resolution 0.125 V
Number of events	175,000
Dips/Interruptions	Yes
Time resolution	5 ms
Voltage resolution	0.125 V
Over-voltages	Yes
Frequency	Yes
Harmonics measurement	EN 61000-4-7 (up to 32 <sup>nd</sup> )
Flicker measurement	EN 61000-4-15
Number of recording channels	1 Phase to Neutral 2 Phase/Neutral to Ground
Recording time	1 day to 339 days depending on average time from 1 second to 20 minutes
Transients	Yes
Frequency range	50 Hz $\pm$ 1 Hz and 60 Hz $\pm$ 1 Hz
Safety category rating	CAT II 300 V

## PowerLog software

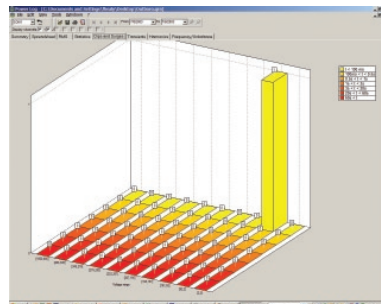


Transient measurement.

**PowerLog Setup** – Simple set up of internal clock, logging periods and intervals with default values for quick results.

**PowerLog View** – Data presentation showing RMS voltage and harmonic trends, actual transients, summary information and statistics in accordance with EN50160.

**Actual transient display (> 100  $\mu$ s) with time stamp** – Quickly identify issues with included graphical software.



Voltage dip measurement.

**Statistical analysis of voltage event** – reduces analysis time by tracking event quantities and magnitudes.