

# Fluke power quality and energy tools

Fluke offers an extensive range of power quality test tools for troubleshooting, preventive maintenance, and long-term recording and analysis in industrial, utilities and commercial building applications



## **Power quality troubleshooters and analyzers:**

Dedicated power and power quality meters for single-phase and three-phase frontline power quality troubleshooting with load studies, energy waste analysis and quality of service compliance testing. Along with models for advanced power quality and motor analyzers for predictive maintenance.



## **Power quality and energy loggers:**




Power and Energy loggers for characterizing power quality, conducting energy and load studies and capturing hard-to-find voltage events over a user-defined period of time.



## **Power quality recorders:**

Advanced power quality recorders for capturing comprehensive details of power disturbances including waveforms, trend analysis and Class-A 'quality-of-service' compliance testing over long period of time to capture the most difficult to trace problems.

# Choose the right tool for the job.

-  Troubleshooters and analyzers
-  Loggers
-  Recorders



Application use	Single-phase		Three-phase										
	VR1710	345	1732/1734 <sup>1</sup>	1736/1738 <sup>2</sup>	1742	1746	1748	434-II	435-II	437-II	438-II	1750 <sup>4</sup>	1760
<b>Energy studies</b>													
Measure V, I, kW, Cos/DPF, kWhr		•	•	•	•	•	•	•	•	•	•	•	•
Measure MIN/MAX and AVG values		•	•	•	•	•	•	•	•	•	•	•	•
10 day logging		•	•	•	•	•	•	•	•	•	•	•	•
Waste energy monetization								•	•	•	•		
<b>Basic harmonics study</b>													
THD measurement (V & I)	•	•	•	•	•	•	•	•	•	•	•	•	•
Harmonics 1 to 25 for V & I	• (V only)	•		•		•	•	•	•	•	•	•	•
<b>Advanced harmonics study</b>													
Full harmonic spectrum		•		•		•	•	•	•	•	•	•	•
Power harmonics		•		•		•	•	•	•	•	•	•	•
<b>Basic industrial PQ troubleshooting</b>													
Oscilloscope function		•		•		•	•	•	•	•	•	•	•
Voltage dips and swells	•			•		•	•	•	•	•	•	•	•
<b>Advanced PQ troubleshooting</b>													
Comprehensive logging capability		•		•		•	•	•	•	•	•	•	•
<b>Advanced Features</b>													
Inrush				1738 <sup>2</sup>				•	•	•	•	•	•
Flicker	•				•	•	•	•	•	•	•	•	•
Transients	•							• <sup>3</sup>	•	•	•	•	•
Mains signaling							•	•	•	•	•	•	•
Power wave									•	•	•		
Event waveform capture	•			1738 <sup>2</sup>				•	•	•	•	•	•
400 Hz										•			
Shipboard power										•			
Power inverter efficiency									•	•	•	•	
<b>Motor analysis</b>													
Speed, torque, mechanical power, efficiency									Optional	Optional	Optional	•	
<b>Communications</b>													
USB	•	•	•	•	•	•	•	•	•	•	•	•	•
Ethernet					•	•	•					•	•
Wireless download			1734 <sup>1</sup>	•	•	•	•	•	•	•	•		
Fluke Connect app			1734 <sup>1</sup>	•				•	•	•	•		
<b>Safety</b>													
600 V/CAT IV		•	•	•	•	•	•	•	•	•	•	•	•
600 V/CAT III													
300 V/CAT II	•												
Power from measurement line	•		•	•	•	•	•						

<sup>1</sup>An upgrade package is available to upgrade an existing 1732 Energy Logger with the same features and capabilities of the 1734 Energy Logger.  
<sup>2</sup>An upgrade package is available to upgrade an existing 1736 Power Logger with the same features and capabilities of the 1738 Advanced Power Logger.  
<sup>3</sup>Event waveform capture (10.24kHz sampling).  
<sup>4</sup>Not available in Europe

## Application software

Each Fluke power quality product includes powerful application software that enables you to change measurement data into valuable reports that can be shared with key stakeholders to develop solutions. Each software package includes reporting tools that create valuable insights in to the performance of your electrical system.

Software package	Supports	Download	Graphing	Export raw data (text/CSV)	Advanced mixed parameter graphing	Add instrument screen and other images	Automatic reporting	Customized reporting	Report export to MS Office
PowerLog Classic	VR1710, 345 and 430 Series I	USB	•	•			•		
Fluke Energy Analyze+	1732, 1734, 1736, 1738, 1742, 1746 and 1748	USB, Memory stick, Ethernet (1740 series) and WiFi	•	•	•	•	•	•	•
PowerLog 430-II	430 Series II products	USB and WiFi	•	•			•		
Power Analyze	1750	Ethernet and Bluetooth	•	•			•	•	•
PQAnalyze	1760	Serial (USB) and Ethernet	•	•			•		•

## Out-of-the-box solutions for energy optimization and power quality

Fluke tools will help you troubleshoot, record, and analyze power quality and energy parameters with speed and confidence.

Every Fluke energy optimization and power quality tool is a solution beginning

with an intuitive user interface that makes advanced features easy to access. Flexible and powerful software is included with each tool, at no extra cost. Fluke offers a comprehensive line of troubleshooters, power and energy loggers, and recorders to handle a broad

range of power quality applications. But how do you know which tool is right for which job? Use the quick reference guide below to identify the right tool for the problems you're experiencing.

	Troubleshooters and analyzers ▲	Loggers ○	Recorders ■
<b>Why use one?</b>	These instruments include a live display when immediate access to the diagnostic information is needed.	Loggers are the basic tools for creating energy usage profiles used in monitoring and targeting. You can also use a power quality logger to validate voltage quality and look for general trends in the power quality.	Many problems can't be found immediately, especially those caused by different loads interacting. Use these instruments to record in depth voltage and current information over time, so you can better diagnose and resolve problems.
<b>When?</b>	Whenever a recurring problem exists (such as overheating transformers and motors, and nuisance tripping of breakers).	When you need to know the loading on a system, or to understand the general quality of service.	When intermittent voltage disturbances or high-speed transients cause problems.
<b>Who?</b>	On-site electrician or electrical technician.	Power quality specialist, on-site electrician or electrical technician, engineer facilities technicians and high-end electrical contractors, commissioners of new equipment.	Facility manager, plant manager, Industrial engineers and technicians, utility power engineer, power consultants.

*Fluke. Keeping your world up and running.®*