VR 101S Voltage Event Recorder System

Set up, plug in, download, and analyze

The Fluke VR101S is the perfect system for catching sags, swells, transients, outages and frequency variations on line voltage at receptacles, where the most sensitive loads are connected. The VR101S is a starter system that includes a compact VR101 event recorder, an optical interface cable, and EventView™ software that turns your PC into a power quality reporting tool. Additional VR101 event recorders can be purchased individually, so you can monitor several voltage conditions at multiple locations at once.

To set up a VR101 event recorder, just enter the event capture limit parameters on your PC and load them into the recorder. EventView software and the optical interface cable make it easy. Then plug the recorder into the outlet you need to test, and leave it—there's no need to leave a computer hooked up.
The compact recorder stores any voltage event that goes outside your limits.

The VR101 recorder can store up to as many as 4000 events and a flashing LED tells you when events have been captured.

To get data out of the recorder, hook it back up to your computer. EventView software can download a complete history of the events that occurred while the recorder was plugged into the receptacle. The software lets you build a detailed report of sags, swells, transients, outages and frequency variations with time-stamps and durations.

Safety Conformance
The VR101S is protected to EN61010-1, CAT III 300V. CSA and UL listed.

Accessories and Ordering Information

Included Accessories
VR101S : Optical interface cable, 9-to-25 pin adapter, EventView Software on two 3 1/2 inch floppies.

Ordering Information
Fluke VR101S   Voltage Event Recorder System
Fluke VR101   Voltage Event Recorder
(Note: At least one VR101S is required for proper operation.)

Specifications

Electrical (voltage versions, plug style, and manual languages are determined by country			
Voltage version	**Operating range**	**Nominal frequencies**	**Power consumption**
120V Version	70V to 140V	50 Hz to 60 Hz	2W
230V Version	140V to 270V	50 Hz to 60 Hz	3W
Sags, Swells & Outage Measurements			
Voltage version		**Range**	**Accuracy**	**Resolution**
120V Version	Hot-to-neutral	0 to 200 Vrms	± 2 Vrms	1 Vrms
120V Version	Neutral-to-ground	3 to 200 Vrms	± 2 Vrms	1 Vrms
230V Version	Hot-to-neutral	0 to 400 Vrms	± 4 Vrms	2 Vrms
230V Version	Neutral-to-ground	3 to 150 Vrms	± 2 Vrms	1 Vrms

Transient Measurements, Minimum pulse width: 1µs			
	Range	**Accuracy**	**Resolution**
Hot-to-neutral	100 to 2500 Vpeak	± (10% reading + 10V)	10V
Neutral-to-ground	50 to 2500 Vpeak	± (10% reading + 10V)	10V
Phase angle	20° to 180° 200° to 360°	± 1°	1°

Time Measurements: Events < 1 second		
	Accuracy	**Resolution**
Hot-to-neutral	± 0.5 cycles	0.5 cycles
Neutral-to-ground	± 1 cycle	1 cycle

Frequency Measurement:		
	Range	**Resolution**
	45...65Hz	0.1 Hz

Events ≥ 1 second (time stamp)		
	Accuracy	**Resolution**
	± (2 sec/day + 8 sec)	8 sec

Environmental	
Operating temperature	–40 to 70° C
Relative humidity	0 to 95% (non-condensing)

Computer Hardware Requirements
IBM PC or 100% compatible, with Windows 3.1 or Windows 95/98 installed and operating. At least one free RS-232 serial port. A pointing device (recommended). 2 MB hard drive space. 4 MB RAM (8 MB for Windows 95/98).

Memory size: 4000 events
Battery type: 3.5 Lithium (non-replaceable); **Battery life**: 7 years
Size (HxWxD): 62 mm x 68 mm x 85 mm
Weight: 0.12 kg
One Year Warranty