



Periodic Verification System MODEL 775PVS

The Simco-Ion Periodic Verification System Model 775PVS is a hand-held alternative to a charged plate monitor. It consists of three components-a fieldmeter, a detachable plate, and a charger-for measuring static charge and verifying ionizer performance. Used alone, the fieldmeter measures electrostatic fields on any surface.

Ranging lights ensure accurate and repeatable measurements by enabling users to determine the exact distance at which the voltage reading is correct. A SAMPLE and HOLD function allows measurements in places difficult to reach with other instruments. Attach the plate and use the charger, and the Model 775PVS can be used to verify ionizer operation and check ion balance and discharge times. The unit is designed to take measurements that correspond to those made by a charged plate monitor following lonization Standard ANSI EOS/ESD S3.1-2006 of the ESD Association (see graph below). For increased accuracy, the included flexible ground cord should be used to connect to a solid ground during operation.

Features

- Digital display
- Distance ranging lights
- Chopper circuit
- NIST-traceable calibration

Benefits

- Easy to read
- Ensures accurate distancing and measurements
- · Operates in an ionized environment
- Correlatable to a charged plate monitor

Specifications

775 Electrostatic F	ieldmeter
Input	9 VDC alkaline battery included; life in excess of 40 hours
Display	3-1/2 digits, 0.4" (1 cm) digit height
Output	Analog output through miniature jack, 1V corresponds to 10 kV
Response	5 Hz at analog output, digital display updates 3 times per second
Features	HOLD and LOW BATTERY indicators, automatic polarity
Controls	On/off pushbutton, SAMPLE/HOLD pushbutton, ZERO control
Range	± 0.00 to 19.99 kV @ 1" (2.5 cm); higher voltages may be measured if distance is >1" (2.5 cm)
Accuracy	\pm 5%, chopper stabilized (accuracy unaffected by air ionization), least significant digit of display indicates tens of volts
Environment	Operates at 10-40°C (50-104°F) and 0-85% RH (non-condensing)
Ground	Ground through conductive case or snap-fastener
Dimensions	4.2L x 2.4W x 0.9D in. (10.7L x 6.1W x 2.3D cm)
Weight	5 oz (142g) with battery
Certifications	CE
775 Plate Assembl	у
Plate capacity	15 picofarads ± 2 picofarads
Calibration	Adjusting screw provided
Range	0-2 kV for either polarity, higher voltages may be measured
Ground	Ground plate attaches to conductive case of 775 Fieldmeter
Dimensions	1.0H x 3.0W x 1.3D in. (2.5H x 7.6W x 3.3D cm) supported on Teflon $^{\rm tw}$ standoffs
Weight	2.5 oz (71g)
Certifications	CE
775C Charger	
Input	9 VDC alkaline battery included; life in excess of 20 hours continuous operation
Output	1300 VDC $\pm 20\%$ for each polarity, current limited to ${<}1$ microamp
Power Indicator	Red LED
Features	Calibration set screw, pushbutton on/off
Output contacts	Two stainless steel contact plates, output polarity depends on which plate is grounded
Dimensions	4.2L x 2.4W x 0.9D in. (10.7L x 6.1W x 2.3D cm)
Weight	4 oz (113g) with battery
Certifications	(€

Plate Assembly and Charger

The Plate Assembly and Charger have been designed to match the small size of the fieldmeter. The charger contains an isolated power supply with two stainless steel contact plates for positive or negative charging. A set screw in the plate assembly calibrates the measured voltage.

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Ordering Information

91-0775PVS	Periodic Verification System Model 775PVS
19-0775PVS-CR	Calibration certificates
91-0775	Replacement Fieldmeter
91-0775C	Replacement Charger



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Technology Group 1750 North Loop Rd., Ste 100 Alameda, CA 94502 Tel: 800.367.2452 (in USA) Tel: 510.217.0600 ioninfo@simco-ion.com www.simco-ion.com