



Periodic Verification System

MODEL 775PVS

Ion Systems' 775pvs Periodic Verification System 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 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 Ionization Standard ANSI EOS/ESD S3.1-2000 of the ESD Association (see graph below). For increased accuracy, a conductive, impact-resistant case and flexible ground cord facilitate grounding.

Features and Benefits

- Digital display
- Easy to read
- Distance ranging lights
- Ensures accurate distancing and measurements
- Chopper circuit
- Operates in an ionized environment
- NIST-traceable calibration
- Correlatable to a charged plate monitor

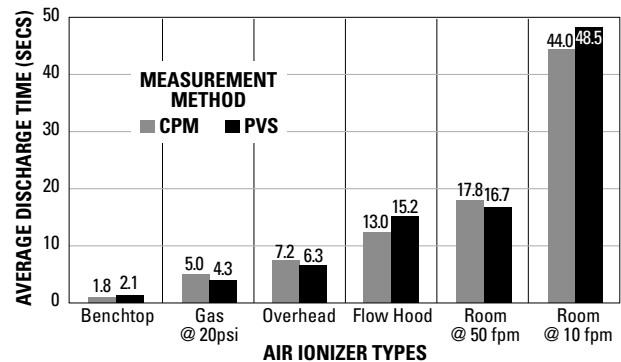


Specifications

Electrostatic Fieldmeter	
Input	9 VDC alkaline battery; battery life in excess of 40 hours; battery included
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 at 1" (2.5 cm), higher voltages may be measured if distance is greater than 1" (2.5 cm)
Accuracy	±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 Assembly	
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™ standoffs
Weight	2.5 oz (71g)
Certifications	CE
775C Charger	
Input	9 VDC alkaline battery; battery life in excess of 20 hours continuous operation; battery included
Output	1300 VDC ±20% for each polarity, current limited to less than 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	CE

Plate Assembly and Charger

The 775 Plate Assembly and 775c 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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