



PFK-100 Field Meter Set

The PFK-100 set includes Prostat's unique PFM-711A dual range field meter, CPM-720A charged plate monitor assembly and PCS-730 ±1 kV charging source. With this instrument set you can measure electrostatic fields, analyze ionizer performance and assess the voltage generation of materials, equipment and personnel.

The battery operated PFM-711A Field Meter is a compact "electronic chopper" design with accuracy of ±2% at ambient conditions (23 °C and 30% Rh). It features automatic polarity, measurement "hold" button, low battery indicator, high and low

ranges, distance ranging lights for accurate and repeatable measurements, manual zero control and a ground snap. With the supplied analog output cable, it can be used in conjunction with an X-Y plotter or any analog data-recording device.

Specifications

PFM-711A FIELD METER

3½ digit Liquid Crystal Display with 0.4" digit height. **Meter Display:** Automatic polarity, HOLD and LOW BATTERY indicators.

Output: Analog signal output and 30" two conductor cable

provided. ±10.0 kV meter reading equals ±1.0 Volt output.

High Range 0 V to ±19.99 kV; least significant digit Range:

indicates tens of volts at one inch distance.

Low Range 0 V to ±1,999 V; least significant digit indicates 1 Volt at 1" distance. Measures higher voltages at greater distances, e.g., at 2" double indicated voltage, at 4" multiply indicated voltage by four.

Range Lights: Red "Bulls Eye" at one inch distance

Accuracy & ±2% at ambient conditions (23 °C and 30% Rh). **Environment:** ±5% at 0 to 50 °C and 0 - 85% Rh (non-condensing). Accuracy unaffected by the presence of air ionization. **Response:** Digital display updates three (3) times per second.

Analog Output Time Constant: Either Range 0.1 sec. Display Time Constants: High Range 0.2 sec.

Low Range 2.0 sec.

Controls: Three position slide switch: KV/INCH - OFF - V/INCH

Sample/HOLD push button, and ZERO adjust knob.

Grounding: Meter circuit grounded through the conductive case and 10

mm snap fastener mounted on back of case.

Power: 9 Volts alkaline battery. Battery life minimum 40 hours.

Dimensions (W x L x D): 2.4" x 4.2" x 0.9" (1.3" deep with zero knob and snap

fastener). (6.1 cm x 10.7 cm x 2.3 cm)

Weight: 5 oz with battery (142g)

PCS-730 CHARGING SOURCE

Input Power: 9 Volts Alkaline Battery. Battery life in excess of 40 hours

continuous operation

Output: ±1,000 volts DC Minimum, Current limited to less than 1

Microamp

Output Connector: Female banana jack provided with mating contact rod

Grounding: 10mm female snap fastener on rear of case. Note that

wand must be installed and unit grounded for proper

operation

Dimensions (W x L x D) 2.5" x 4" (4.2" with jack) x 1.5" (1.8" with switch and snap)

(6.3 cm x 10 cm x 3.8 cm)

Weight: 6 oz with battery (170g)

CPM-720A CHARGE PLATE ASSEMBLY

Isolated Plate: Stainless Steel parallel plates, 3.25" square. Auxiliary

female jack installed.

Capacitance: Plate Capacitance 10 picofarads (pF) ±1 pF

Range: 0 to ±6 kV at a plate separation of 0.60"

Accuracy: ±2% at 1,000 Volts. Calibration adjustment screw provided

Grounding: Through conductive case and snap fastener of Model

PFM-711A

Dimensions (W x L x D): 3.25" x 3.25" x 0.9" (8.25 cm x 8.25 cm x 2.3 cm)

Weight: 8 oz (227g)

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