

DC Hipot Megohmmeter Combination Units

Two HV Portable DC Test Sets for the Price of One!



PTS-75 Model
(0-75 kVdc, 10mA)



PTS-130 Model
(0-130 kVdc, 10mA)



PTS-200 Model
(0-200 kVdc, 5mA)

Product Description

The **PTS Portable DC Test Set Series** of products are combination high voltage DC proof testers and HV Megohmmeters. Testing for dielectric strength and insulation resistance is now served with one instrument, saving money, size and weight. The PTS Series is designed and constructed with field use in mind. It is rugged, reliable and contains all of the features needed for electrical maintenance testing of new or installed electrical apparatus.

Three one piece construction models are available: 37.5 kV, 75 kV and 80kV rated up to 10 mA. Our 100 kV, 130 kV and 200 kV models are designed with separate controls and HV tank. They are fully adjustable and may be used to their full rating for either Hipot or Megohmmeter applications. The PTS Series contains numerous features that make it the best Hipot/Megohmmeter available. The fully adjustable 200 kVdc model is pictured at lower left.

Advantages

Like all High Voltage, Inc. equipment, the PTS Series is newly designed, incorporating the latest advances in high voltage technology. No other instrument offers the features, quality and reliability offered here. Several of the many unique advantages are:

- Five range current meter with a 0-1 uA low range for Leakage Current measurements with resolution to 10 nanoamperes
- Megohm readings at any output voltage
- Regulated input for accurate, reliable results—ideal for field generator use +/- 1% stability with +/- 10% line change (PTS-37.5 & PTS-75 models)
- Internal HV shorting solenoid with discharge resistor
- Continuous Duty Cycle
- Automatic transit protected meters
- Rugged case with cushion grip handles

Applications

The **PTS Series** can be used as a high voltage DC Proof/Hipot tester or as a high voltage Megohmmeter. It is used to proof test or megohm cable insulation, switchgear, motors, transformers, insulators, generators and other electrical apparatus. Its combination Hipot/HV Megohmmeter capability makes it extremely versatile, especially for field testing applications.

HIGH VOLTAGE, INC.

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DC Hipot/Megohmmeter

Combination Units

Common Specifications

Output:

Negative polarity –
positive ground
Duty continuous

Meter Ranges:

0 – 1.0 uA current w/multipliers
x1.0, x10, x 100, x 1K, x 10K
1 – 100 megohms w/multipliers
x 0.1, x1, x 10, x 100, x 1K

Meter Type:

3.5 inch analog
2% full scale accuracy

Cables & Leads

20' Shielded output cable
with clip & boot
20' Return lead with clip & boot
20' Ground lead with clip & boot
10' Input line cord
Ground stick with 20' Lead with Clip

300 kV DC model also available

Features

Following are some of the more outstanding features of the PTS Series:

- Two range voltmeter—five range current meter with a 0-1 uA low range with resolution to 10 nanoamperes
- Output current limited to 10 mA
- Internal HV shunting solenoid with discharge resistor
- Automatic transit protected meters
- **Insulated Return and Guard circuit to bypass stray unwanted leakage current**
- Ground hook with 20' Lead with Clip
- Rugged case with storage for all input/output leads and ground stick (PTS 37.5 through PTS 80)
- Cable storage bin on HV tank (PTS 100 through PTS 200)
- Surge and transient protection
- External safety interlock
- Zero start safety interlock



Control Panel Layout • PTS-75

	PTS Model Specifications					
	PTS-37.5 PTS-35 (50Hz)	PTS-75 PTS-70 (50Hz)	PTS-80	PTS-100	PTS-130	PTS-200*
Input:	60 Hz 50/60 Hz	120 V, 5 Amps 230 V, 3 Amps	120 V, 10 Amps 230 V, 3 Amps	120 V, 10 Amps 230 V, 5 Amps	120 V, 15 Amps 230 V, 3 Amps	120 V, 15 Amps 230 V, 3 Amps
Output:	60 Hz 50 Hz	0-37.5 kVdc, 10 mA 0-35 kVdc, 10 mA	0-75 kVdc, 10 mA 0-70 kVdc, 10 mA	0-80 kVdc, 10 mA	0-100 kVdc, 10 mA	0-130 kVdc, 10 mA 0-200 kVdc, 5 mA
Polarity:	Negative output. Positive ground.					
Duty:	Continuous, capacitive charging					
Ripple:	N/A capacitive load Less than 2.5% RMS					
Regulation:	<1% with 10% input line change capacitive load			N/A (no ferro-resonant regulator)		
Kilovoltmeter:	0-15/37.5 kVdc	0-37.5/75 kVdc	0-40/80 kVdc	0-50/100 kVdc	0-75/150 kVdc	0-80/200 kVdc
Current Meter (Megohm Scale)	0-10 dc microamperes, w/ x1, x10, x100, x1k, x10k 100-1 Megohms, w/ x.1, x1, x10, x100, x1k					
Control Case:	14w x 11d x 14h 356 mmw x 279 mmd x 356 mmh	14w x 11d x 18h 356 mmw x 279 mmd x 457 mmh	14w x 11d x 18h 356 mmw x 279 mmd x 457 mmh	14w x 11d x 14h 356 mmw x 298 mmd x 356 mmh	14w x 11d x 14h 356 mmw x 279 mmd x 356 mmh	14w x 11d x 14h 356 mmw x 279 mmd x 356 mmh
H.V. Tank:	Included in Control	Included in Control	Included in Control	9.5w x 11.75d x 14.5h 241 mmw x 298 mmd x 368 mmh	12.5w x 12d x 18h 318 mmw x 305 mmd x 457 mmh	13w x 14.5d x 30.5h 330 mmw x 368 mmd x 775 mmh
Control Weight:	50 lbs. (23kg)	68 lbs. (31kg)	62 lbs. (28kg)	30 lbs. (14kg)	30 lbs. (14kg)	30 lbs. (14kg)
Tank Weight: (With Cable)				68 lbs. (31kg)	82 lbs. (37kg)	150 lbs. (68kg)

NOTE: For 230 Volt line input models, the F suffix is added to the base model number.

*EPR flexible high voltage x-ray cable is used for the output.

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High Voltage, Inc. designs and manufactures high voltage test equipment for utility and industrial applications. Also available are Very Low Frequency (VLF) high voltage AC test sets, DC power packs, AC and DC instrumented test sets, cable fault locators and other products.