



Cable Fault
Locators
w/TDR



Oil/Fluid
Dielectric
Testers



Very Low Frequency
AC Technology
W/TD & PD Diagnostics



Portable AC Hipots
Higher kVA AC
Test Sets



DC Hipots &
Megohmmeters

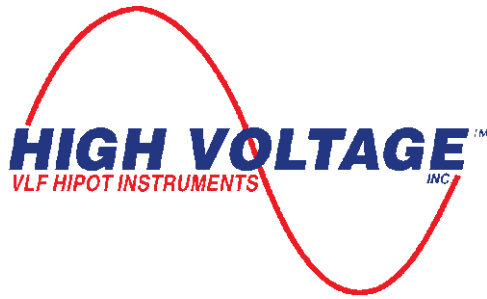


HV
Divider



Aerial Lift
Testers

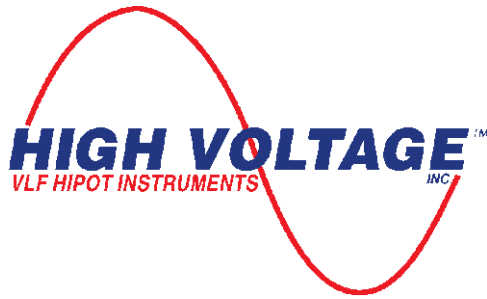
***HVI Products Are Designed to Surpass All Others
in Features, Specifications, and Ease in Use
HVI - The Source For Field HV Test Equipment***



High Voltage Test Equipment

HVI produces high voltage test equipment designed for testing electrical apparatus used in the production, transmission, & distribution of electricity. Although most products are portable and designed for field testing substation equipment, aerial lifts, motors/generators, cables, cable fault locating, etc, there are also larger products for OEMs to factory test electrical equipment produced to create and control electricity.

- Utilities and Power Producers
 - Testing Service Companies
 - Motor/Transformer Repair Shops
 - Electrical Contractors
 - Large Industrial/Commercial Installations
 - HV Electrical Apparatus Manufacturers



PFT Series Portable AC Hipots

Improved Design Making AC Testing Easier

Models Available

PFT-103CM 0-10 kV @ 3 kVA

PFT-301CM 0-30 kV @ 1 kVA

PFT-303CM 0-30 kV @ 3 kVA

PFT-503CM 0-50 kV @ 3 kVA

PFT-1003CM 0-100 kV @ 3 kVA



PFT-1003CM

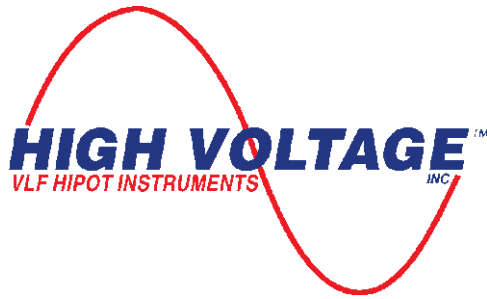


PFT-301CM



Higher voltage and kVA available with
HPA Series AC Dielectric Test Sets





PFT Series - Biggest Seller

Model PFT-503CM

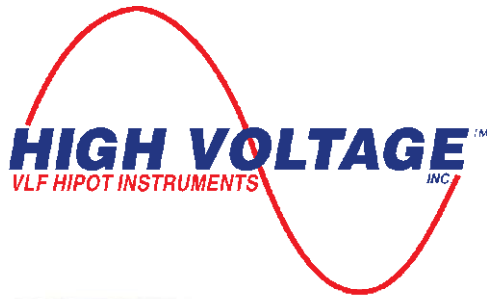
0 - 50 kVac @ 3 kVA

The PFT-503CM is the **utility and testing service favorite** for testing vacuum bottles, switchgear, circuit breakers, reclosures, and other substation apparatus. Why?

It is the only 0 - 50 kVac @ 3 kVA hipot available in a **single-piece** design including an **18' (6m) shielded output cable**.



Lighter - Smaller - More Powerful - Easier to use



HPA Series - AC Dielectric Test Sets

5 kVA – 40 kVA w/Multiple Control Options

The HPA Series AC test sets are designed for AC testing applications requiring higher power than offered by our portable PFT Series. Models from 5 kVac - 300 kVac from 5 kVA – 40 kVA are available and in many control configurations.

HPA-30020FC3

0-300 kVac @ 20 kVA



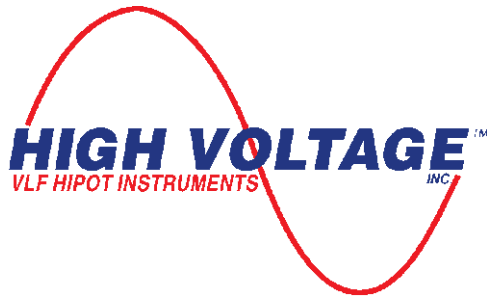
High voltage tanks only are also available for the OEM.

HPA-507.5FC1

0-50 kVac @ 7.5 kVA

Corona < 10pc





HPA Series - AC Dielectric Test Sets

HPA-20020FC3

0 - 200 kVac @ 20 kVA

Output: 0 - 200 kVac @ 20 kVA

Input: 220V @ 100A, 50/60 Hz

Duty: 20 kVA @ 50%, 15 kVA continuous

Pictured here with automatic control package:

Digital metering Adjustable overload

Auto/Manual Control Motorized output control

4 automatic voltage rates of rise

Dwell timer Meter relay preset test voltage

Memory voltmeter



HPA-1010FC3

0-10 kVac @ 10 kVA Portable AC Test Set

Ideal For Rewind Shops

Output: 0 - 10 kVac @ 10 kVA

Input: 230V @ 45A, 50/60 Hz

Duty: 10 kVA @ 50%, 7.5 kVA continuous

Pictured here with automatic control package:

Digital metering

Adjustable overload

Auto/Manual control

Motorized output control

4 automatic voltage rates of rise

Dwell timer

Meter relay preset test voltage

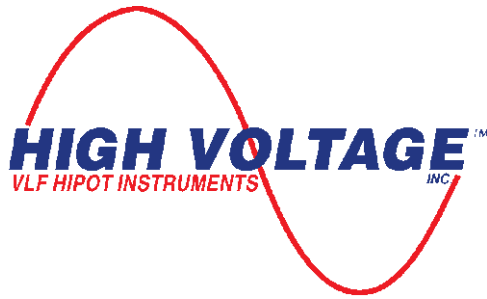
Memory voltmeter

EPR HV shielded output cable

22" w x 26" d x 48" h, 350 lbs

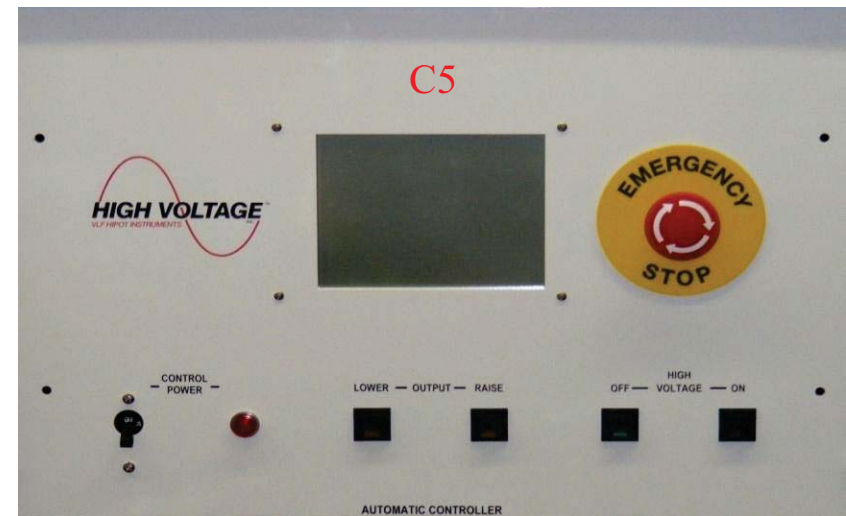
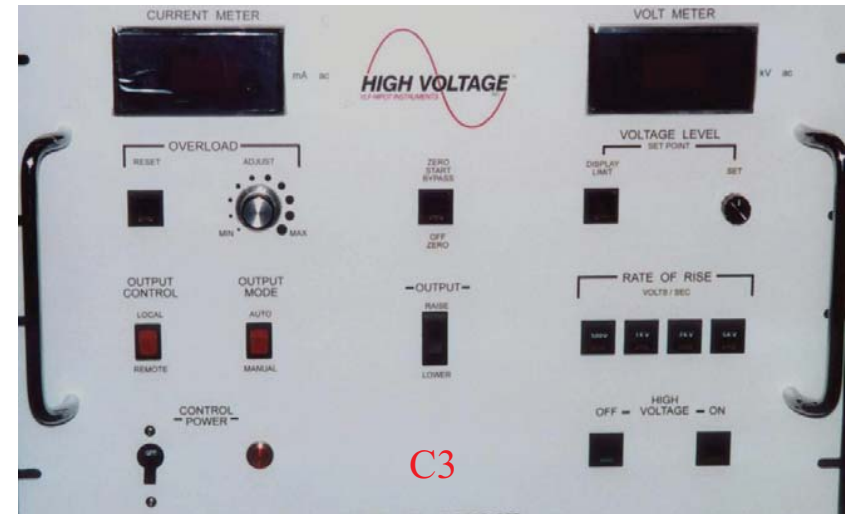
559 w x 660 d x 1219 h, 159 kg

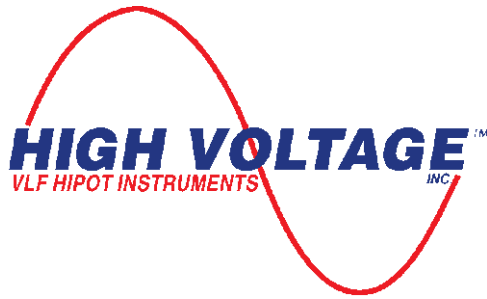




HPA Series - AC Dielectric Test Sets

Several control packages are available, from simple manual controls with analog meters to front panel programmable controls with digital meters to fully PLC controlled operation. See HPA Series brochure for details on controls C1 – C5.





PTS Series – DC Hipots

*Smaller & Lighter – Rugged & Reliable – More Full Featured
Two Instruments In One: Hipot & HV Megohmmeter*

Models Available

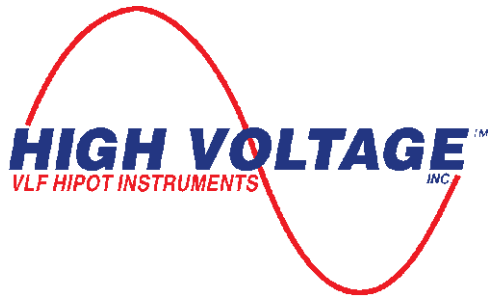
PTS-37.5	0-37.5 kV @ 10 mA
PTS-75	0-75 kV @ 10 mA
PTS-80	0-80 kV @ 10 mA
PTS-100	0-100 kV @ 10 mA
PTS-130	0-130 kV @ 10 mA
PTS-200	0-200 kV @ 5 mA
PTS-300	0-300 kV @ 5 mA
PTS-600	0-600 kV @ 5 mA



PTS-75



PTS-100



PTS Series – DC Hipots

PTS-200

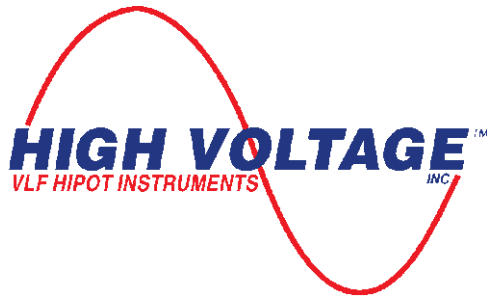
0-200 kVdc @ 5 mA



PTS-300

0-300 kVdc @ 5 mA





PTS Series - Control Panel

The HVI Advantages

Built-in +/- 1% input line regulator to stabilize input power, permitting more accurate leakage current readings (PTS-37.5 and PTS-75 models)

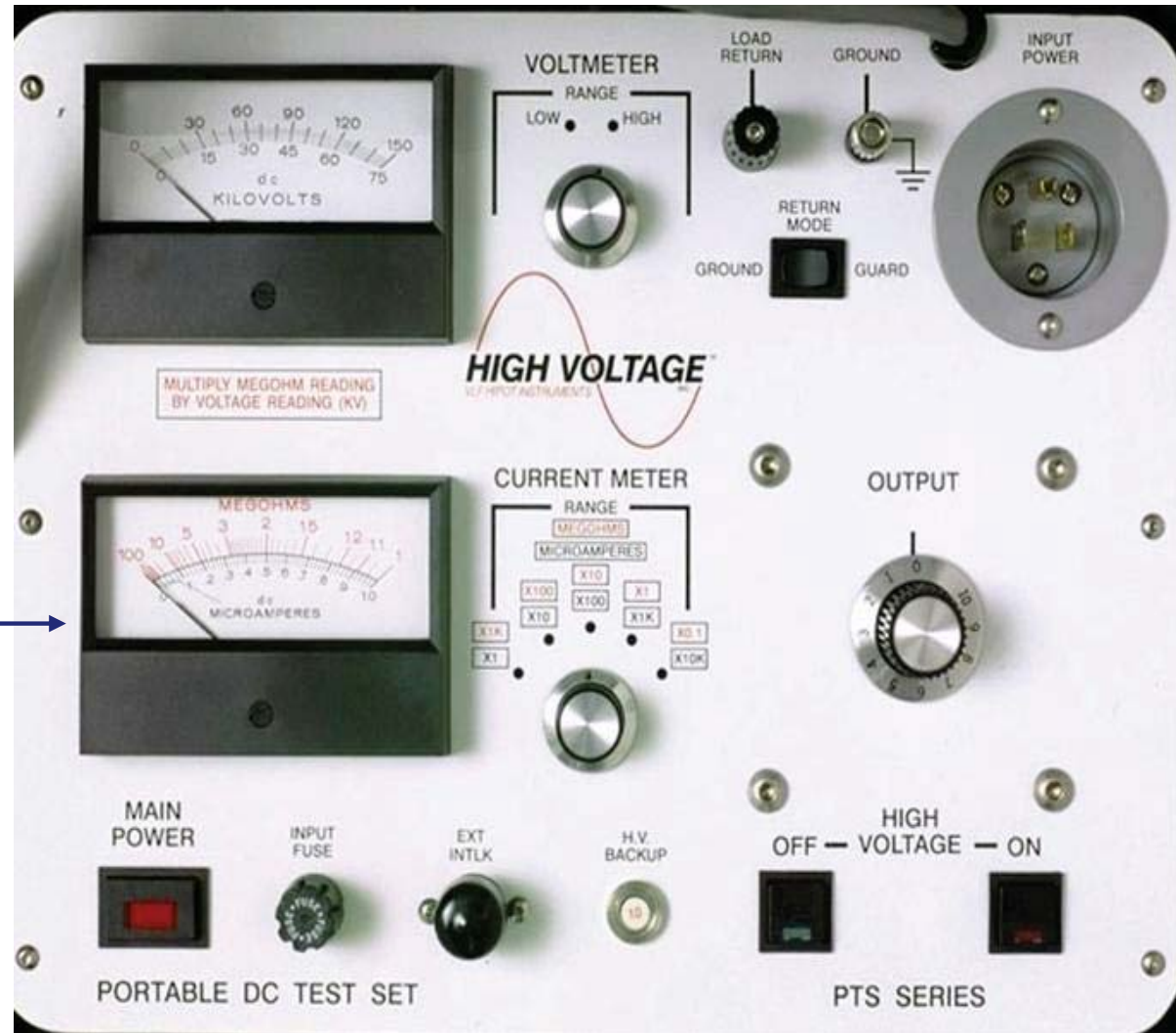
Rugged, transit protected meters. Glass fronts for no static buildup

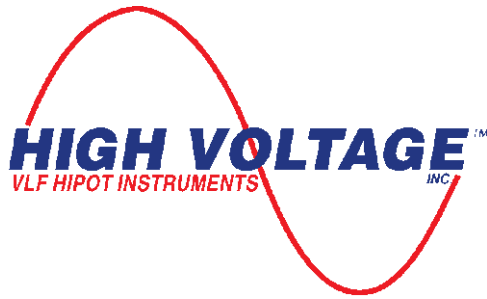
Meter reads leakage current and megohms →

Guard/Ground circuit

Rugged custom cases with cushion grips

Smaller size and weight





ALT Series - Aerial Lift Testers

ALT-120/60

Most powerful, full featured boom and liner tester on the market. No tester offers more power, longer duty cycle, better packaging, and more features.

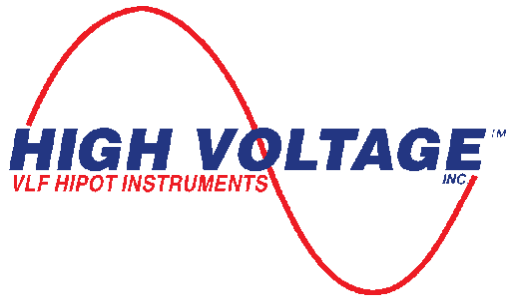
Output: 0 – 60/120 kVac @ 7 kVA

Duty Rating: 7 kVA @ 1 hour - 4 kVA continuous

- Internal inductive compensation
- Internal voltmeter divider
- Detachable interconnect cable
- Smaller size – lower weight



Also popular for AC testing isolated phase bus and other high capacitance loads



ALT Series - Aerial Lift Testers



ALT-200

Output: 0-200 kVac @ 6 kVA

Duty Rating: 6 kVA @ 1 hour

4 kVA continuous



ALT-300

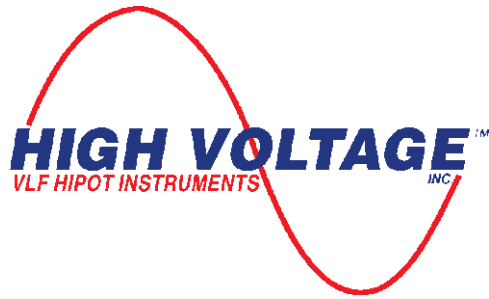
Output: 0-300 kVac @ 7 kVA

Duty Rating: 7 kVA @ 1 hour

5 kVA continuous



ALT-300 in action



DTS Series - Oil Dielectric Testers

Portable - Well Built - Rugged Design

DTS-60D

0 – 60 kVac @ 800 VA

500/2000/3000 V/sec. rate of rise

DTS-100D

0 – 100 kVac @ 800 VA

500/2000/3000 V/sec. rate of rise

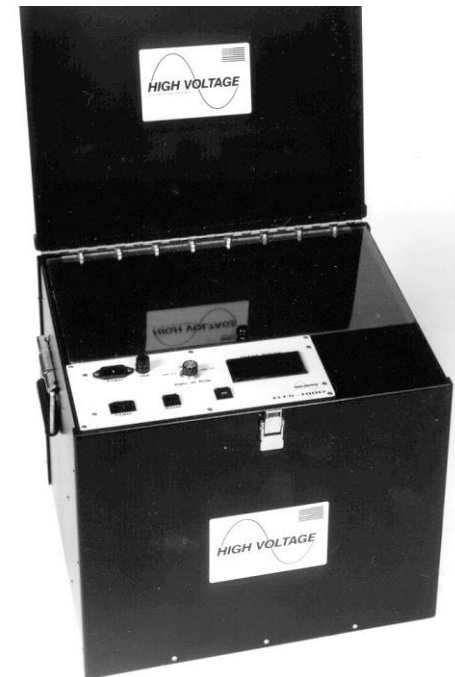


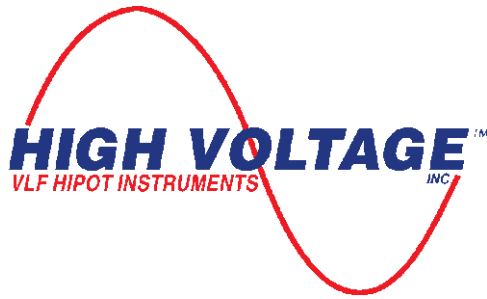
Oil Test Cups

ASTM D877

ASTM 1816

IEC 156





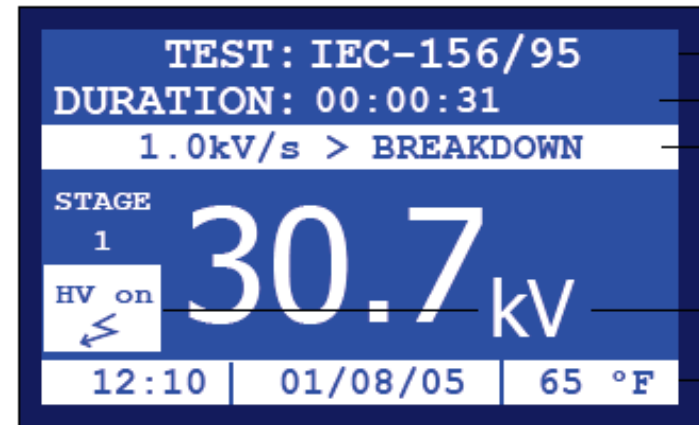
DTS Series - Oil Dielectric Testers

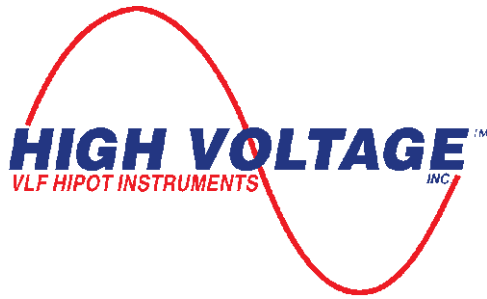
Automatic/Programmable Model

DTS-60A

0 – 60 kVac @ 800 VA

Fully programmable and automatic in operation, including built-in printer.





CDS Series - Cable Fault Finders

Surge Generators/Thumpers

Full featured design offering three output taps, fully variable hipot output, higher burn current, & TDR/radar ready.

Models Available

CDS-2010U 0-5/10/20 kV output taps
1000 joules, 400 mA burn current

CDS-3616U 0-9/18/36 kV output taps
1600 joules, 280 mA burn current

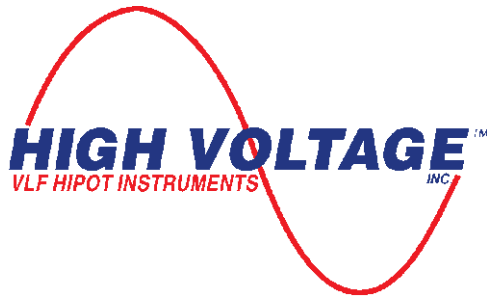
CDS-3632U 0-9/18/36 kV output taps
3200 joules, 280 mA burn current

Custom 100 kV units available



CDS-2010U

Can discharge 1000 joules at just 5kV.
Find your fault without making more.



CDS Series - Cable Fault Finders

Surge Generators/Thumpers

Features & Advantages

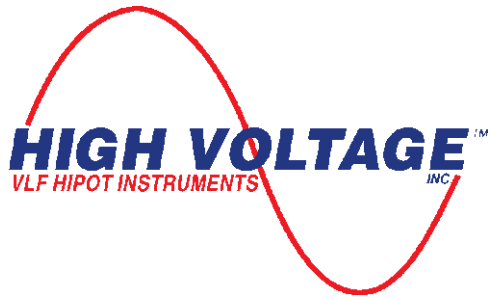
- Controlled Energy Output
- Three output voltage taps
- Highest burn current ratings
- Full range variable hipot output
- Internal arc reflection filter for radar
- Latest TDR/radar technology



CDS-3632U

CDS-2010U Front Panel

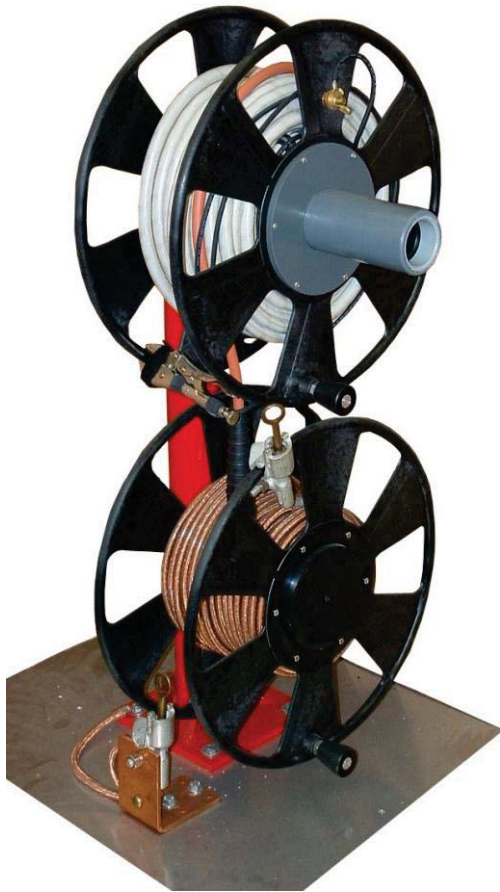




CDS Series - Cable Fault Finders

Accessories

Cable Reels

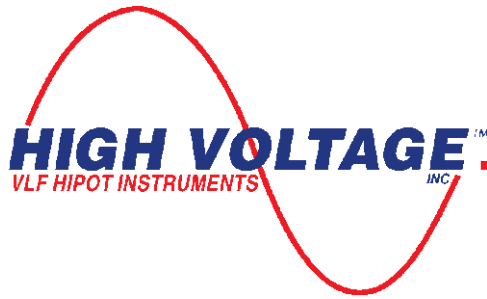


Listening Devices



TDR/Radar





VT Series - VLF Fault Locator

Model VT33

VLF Hipot - VLF Fault Burner – Thumper The Complete Cable Care Tool

Combination VLF AC hipot and capacitor discharge fault locator (thumper)

VLF Output: 0 – 33 kVac @ 0.1 Hz

Load rating: 1 uF @ 0.1 Hz

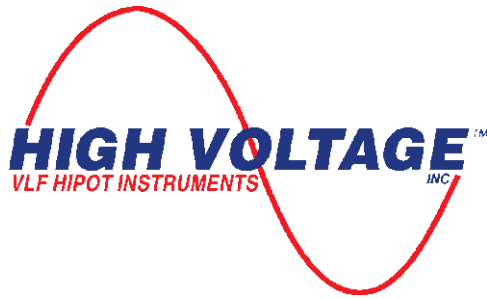
Discharge: 0 – 13 kV @ 760J

VLF Cable Burner to reduce fault voltage

TDR/radar ready



Good for 15 & 25 kV cable



VLF Series - Very Low Frequency AC

Field Test Long Cables with AC Voltage

HVI is the world leader in VLF AC technology with models rated 28 kV – 200 kV with over 1000 units shipped to over 70 countries.

Most of the world has stopped testing cables with DC voltage, with the rest soon to follow. AC voltage testing is the best means of exposing defects in cables and accessories. With the introduction of our patented VLF line in 1998, there is now a **portable and affordable** method of AC field testing cables, generators, and other high capacitance loads. Our VLF hipots are also used as the voltage source for **Tan Delta** and **Partial Discharge diagnostic** testing MV & HV power cables.

HVI manufactures the smallest, lightest, easiest to use, and most affordable VLF AC hipots in the world. U.S. patent # 6169406.

The most models available with the highest voltage and power ratings.

Mature, well established, durable product line

CE Marked



28kV



44kV



62kV



34kV



90kV



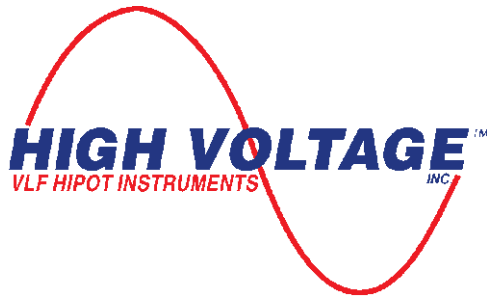
200kV



50, 65, & 120 kV

**VLF Withstand
VLF Tan Delta
VLF Partial Discharge**

**> 1000 units shipped to
over 70 countries**



VLF-6022CM

Biggest Seller Worldwide

VLF-6022CM

0 - 62 kV Peak

0.10 Hz @ 1.1 μ F Load

0.05 Hz @ 2.2 μ F Load

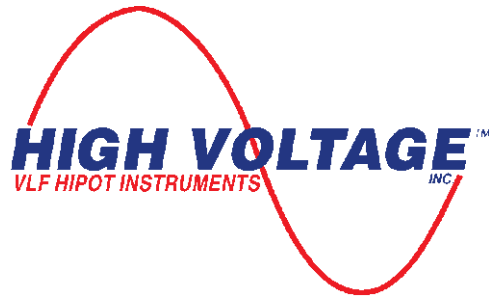
0.02 Hz @ 5.5 μ F Load

Controls: 55 lbs/25 kg

HV Tank: 100 lbs/45 kg

Designed for testing up to
35 kV class cable





VLF-200CM

Highest Voltage Worldwide

VLF-200CMF

0 - 200 kV Peak

0.10 Hz @ .75 μ F Load

0.05 Hz @ 1.5 μ F Load

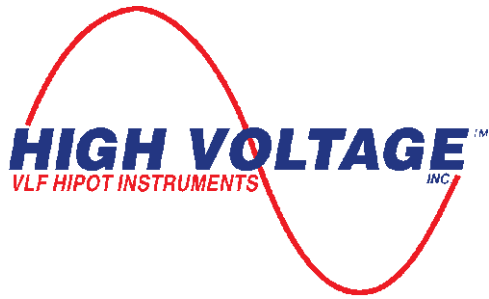
0.02 Hz @ 3.75 μ F Load

Controls: 650 lbs/295 kg

HV Tank: 3700 lbs/1678 kg

VLF hipot up to 138kV cable and use as a voltage source for **Tan Delta** and **Partial Discharge** testing cables rated up to 230kV.



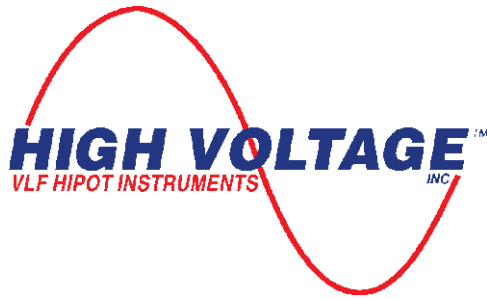


VLF- 34E

0 - 34 kVac Solid State Design Fully Automatic & Programmable

VLF Test – DC Test – Sheath Test – Fault Burn





VLF Cable Testing

Withstand - Tan Delta - Partial Discharge

VLF Withstand: VLF used alone to apply over voltage for a simple proof/stress test to verify cable integrity. Cause defects to fail during test and make the repair or replacement, avoiding in-service failures.

VLF Tan Delta: VLF applies slight over voltage to cable while TD measurement system evaluates extent of overall insulation and accessory deterioration. Helps to prioritize cable replacement and/or injection.

VLF Partial Discharge: VLF applies slight over voltage to cable while PD detection instruments indicate locations and severity of electrical noise.

Use one, two, or all three to learn what you need about your cable to make an educated decision as to corrective action or expected cable life.

Tangent Delta & Partial Discharge

Used with HVI
VLF products



Tan Delta
60 kVac peak



Tan Delta Cable Measurement System
Produced by M & B Systems - England
Provided by High Voltage, Inc. – NY

TD & PD
70 kVac peak

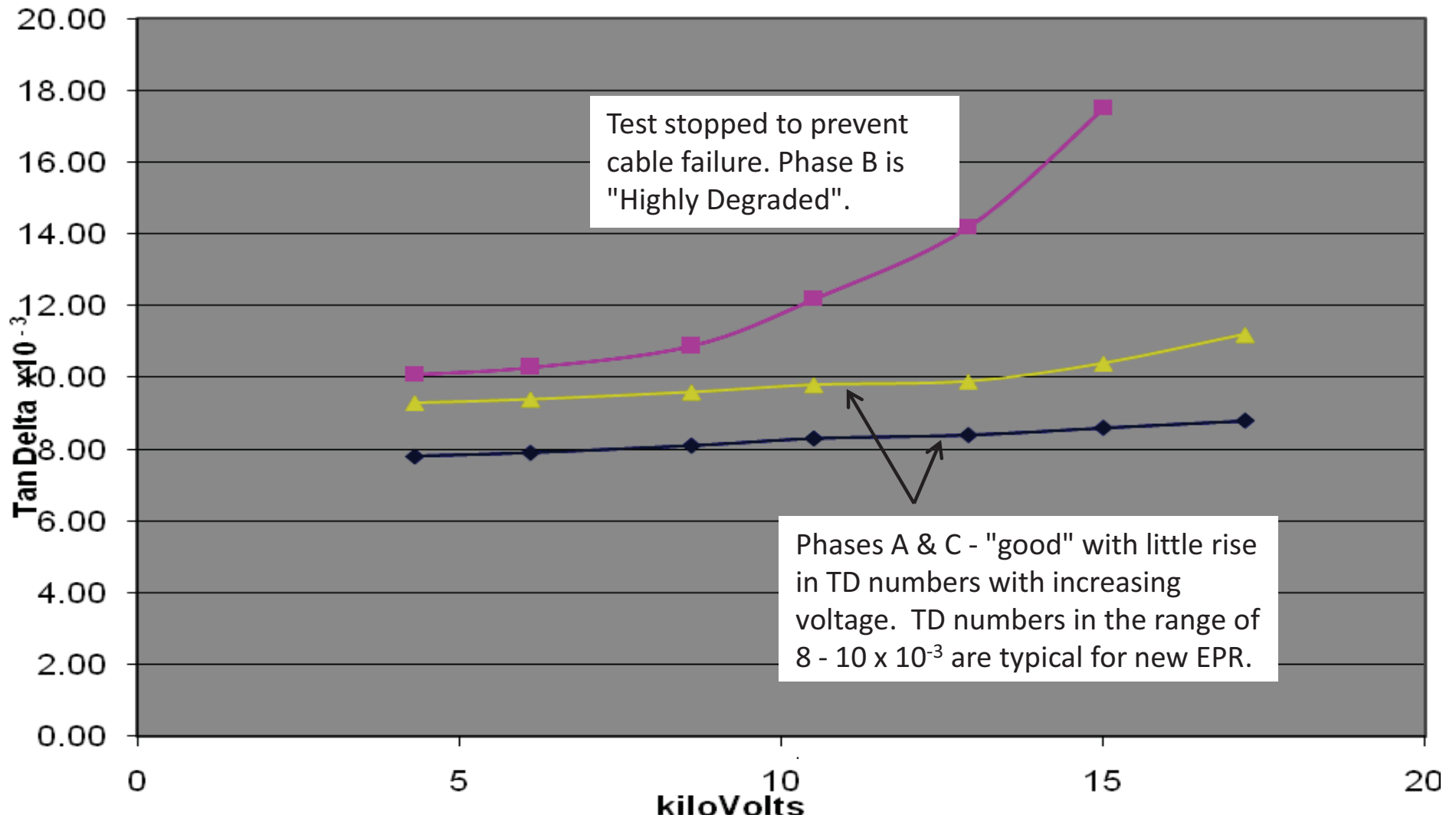


Models up to 200kV available

TD & PD Cable Measurement System
Produced by Power Diagnostix – Germany
Other vendors produce similar products
Offered by several VLF companies

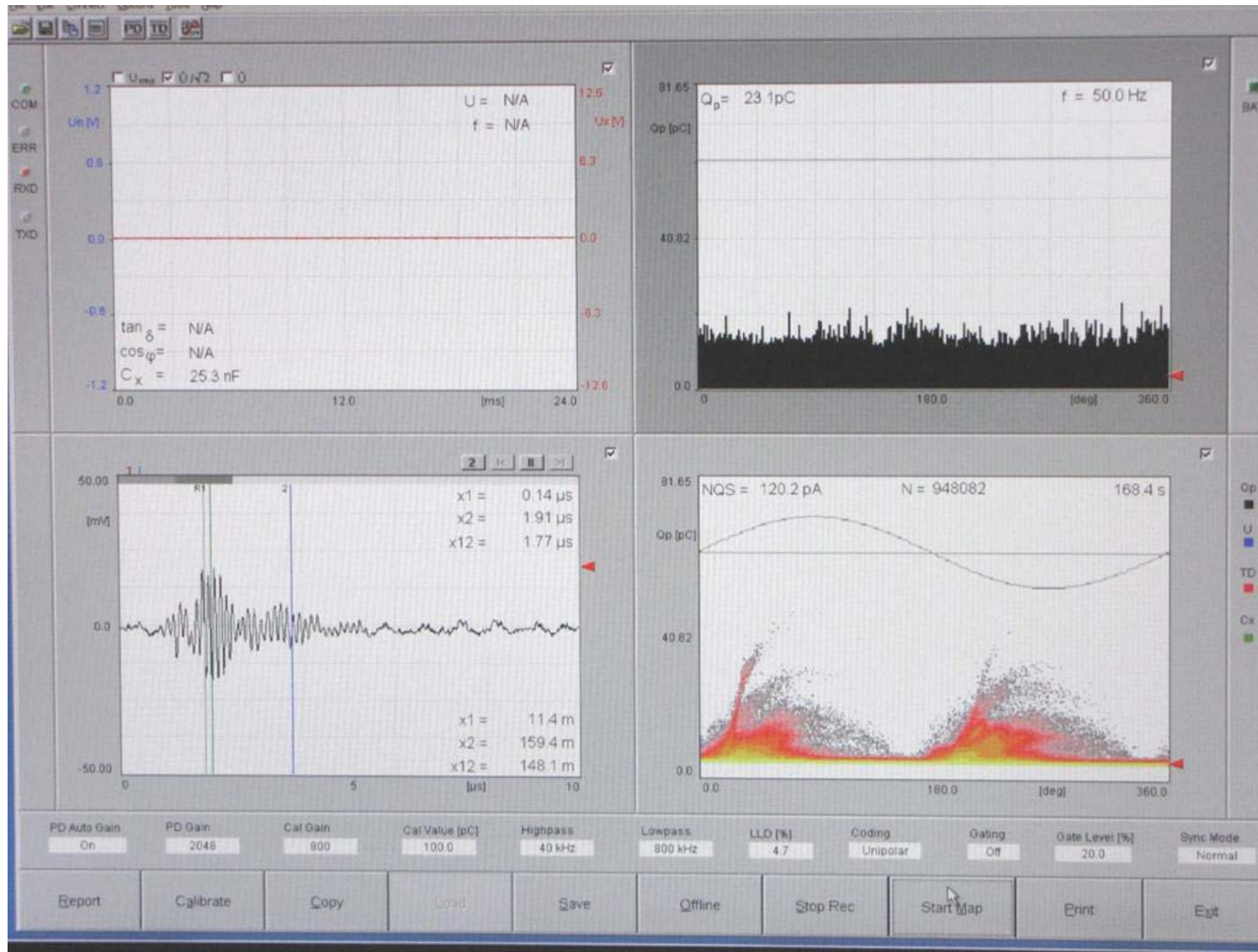
SAMPLE TD TEST CURVE

Tan Delta 15kV EPR

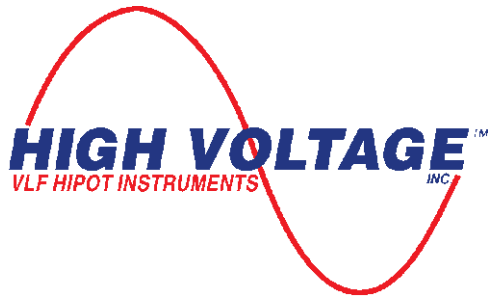


Absolute numbers and the slope of TD curve vs. voltage increase are important indicators of the extent of insulation degradation.

SAMPLE PD SCREEN SHOT



Shows Magnitude and Location of Partial Discharges
From Power Diagnostix Systems GMBH



Cable Testing Packages

VLF - Tan Delta - Partial Discharge - Fault Locating

VLF-200CM mobile package w/TD & PD



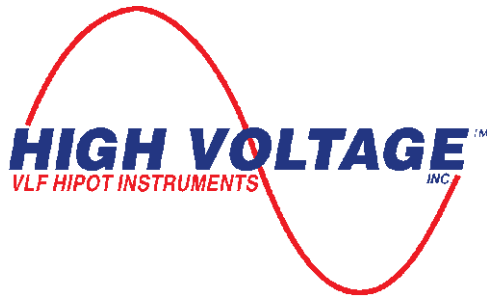
VLF-200CM with 20kw generator



VLF & Thumper Package



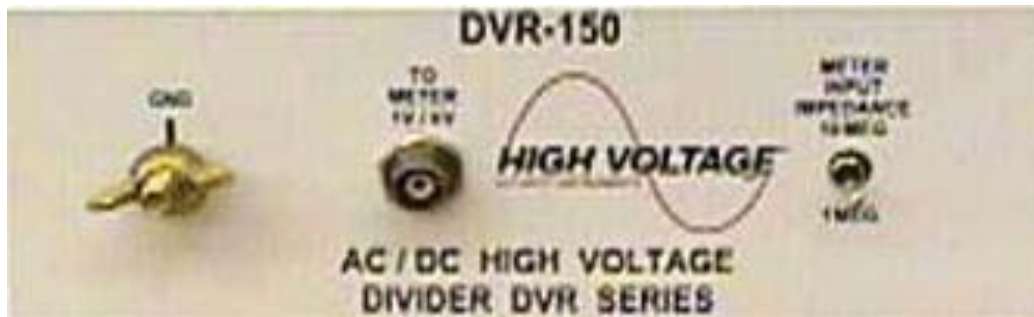
From 15 kV industrial/commercial, to 35 kV wind farm, to 200 kV utility transmission applications, HVI can supply and/or package the appropriate VLF, TD, and PD test equipment, as well as cable fault locators w/TDR, listening devices, cable reels, etc.

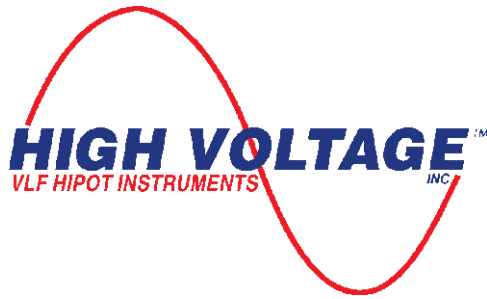


DVR Series - 150kV AC/DC Divider

Model DVR-150

- Voltage Range: 1-150 kV DC or AC to 1 kHz sinusoidal
- Output: 1 volt per 1 kV applied (1000:1 ratio)
- Divider Accuracy: $\pm 0.5\%$, -14 to 104o F, -10 to 40o C,
- Input Resistance: 715 Meg Ohm
- Input Capacitance: 96.3 Pico Farads
- Cable Length: 25 ft. (7.6 M) RG58/U coaxial cable
- Divider Termination: 13 inch (330 mm) diameter spinning
- Dimensions and Weight: 13" w x 13" d x 24.5" h, 20 lbs.
330 mm w x 330 mm d x 622 mm h, 9 kg





CONCLUSION

High Voltage, Inc. has established itself since 1997 as the preeminent high voltage design company. Some of our products, like our VLF AC Hipots and our PFT-503CM enjoy worldwide recognition for their superiority in design. It is no accident that over 50% of our sales are international.

We also offer the quickest deliveries and the most complete and rapid after sales service available.

Let us help you with all of your high voltage test equipment needs.



Cable Fault
Locators
w/TDR



Oil/Fluid
Dielectric
Testers



Very Low Frequency
AC Technology
W/TD & PD Diagnostics



Portable AC Hipots
Higher kVA AC
Test Sets



DC Hipots &
Megohmmeters



HV
Divider



Aerial Lift
Testers

***HVI Products Are Designed to Surpass All Others
in Features, Specifications, and Ease in Use
HVI - The Source For Field HV Test Equipment***

