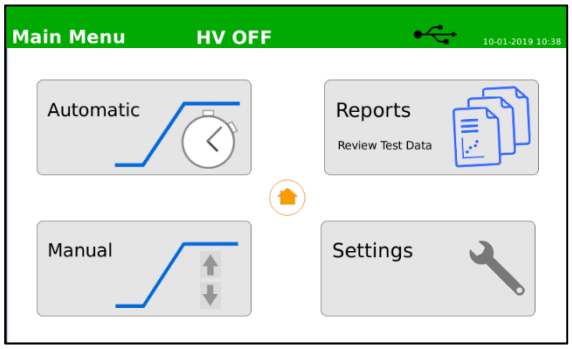
HIPOTRONICS

AC/DC PDTS

AC / DC Partial Discharge Test Systems

HIPOTRONICS offers a full line of AC and DC systems to suit a wide range of partial discharge test applications. Our systems feature low PD AC and DC power supplies and the AC/DC partial discharge test systems are complete with a high voltage transformer, embedded controls, metering, electronic overload circuitry, status indicator lights, low voltage filtering, zero-start interlock, Digital Partial Discharge Detector, Measuring Capacitor with Measuring Impedance and Calibrator. The systems are designed for testing a wide variety of components including transformers, capacitors, connectors, generators, motors, sample lengths of wire and cable etc. according to industry and national consensus standards.

Our Integrated Systems with Test Chambers are a complete single piece solution to PD testing of HV components and insulation materials. They are simple to install and easy to use.



FEATURES

- ☑ **Microprocessor controller** provides better regulation and measuring accuracy
- ☑ **Continuously adjustable test output voltage**
- ☑ **SIL3** compatible
- ☑ **Designed** to operate from 1.0% to 100% (2kVA and 5kVA) or from 3.5% to 100% (for ≥10kVA) of the maximum rated output voltage
- ☑ **Wide range** of voltage and current ratings available
- ☑ **Adjustable Overload** from 10% to 110% of rated current output
- ☑ **Backup Breaker** overload safety situation
- ☑ **Zero start interlock** ensures that the voltage control is at a minimum before HV can be energized
- ☑ **Easy data acquisition** and test report generation

BENEFITS

- ☑ **Fully integrated solution** ensures simple installation and intuitive control panel allows for simple testing
- ☑ **Reliable** and proven AC/DC power supplies
- ☑ **Output Connected Meters** ensures fast and accurate readings

APPLICATIONS

- ☑ Capacitors
- ☑ Bushings
- ☑ Generators
- ☑ Connectors
- ☑ Transformers
- ☑ Moulded Products
- ☑ Insulation Material
- ☑ Cable and Wire Samples
- ☑ Switches and Arrestors
- ☑ Insulated Bus Bars

TECHNICAL SPECIFICATIONS

Voltage Output Range	1.0%-100% of F.S. (2 and 5kVA models), 1.0%-100% of F.S. (≥10kVA)	
Voltage & Current Measurement Accuracy	± 1.5% of Reading ± 0.2% F.S	
Measurement Resolution	0.01kV, 0.01mA	
Ramp Rate Accuracy	+/- 5%	
Step Resolution	0.5% of Full Scale	
AC PD Baseline	≤2pC up to full voltage	
ECCN: 3A992.A		**HTS US:** 9030.39.0100

Notes: *The partial discharge level is inherent to the equipment itself without considering possible external radiated interference from the customer's dedicated mains power supply or ground noise.*

	Electronic Components		**High Voltage Components**	
	Temperature	Humidity (r.h. non-condensing)	Temperature	Humidity (r.h. non-condensing)
Operation	+5°C … +40°C	5 … 95%	-10°C … +45°C	5 … 90%
Storage	-20°C … +70°C	5 … 95%	-10°C … +55°C	5 … 90%

TYPICAL MODELS AND RATINGS

Model	Voltage	Current	Cabinet Size (in) *Single bay / Two Bay*
705-5^-DI**	5kV AC	1000mA	48"W x 36"D x 84"H / 70'W x 36"D x 84"H
710-5^-DI**	10kV AC	500mA	48"W x 36"D x 84"H / 70"W x 36"D x 84"H
715-5^-DI**	15kV AC	333mA	48"W x 36"D x 84"H / 70"W x 36"D x 84"H
730-5^-DI**	30kV AC	167mA	48"W x 36"D x 84"H / 70"W x 37"D x 84"H
750-5^-DI**	50kV AC	100mA	48"W x 36"D x 84"H / 70"W x 37"D x 84"H
775-5^-DI**	75kV AC	67mA	48"W x 36"D x 84"H / 70"W x 37"D x 84"H
730-10D*-^-B**	30kV AC	333mA	70"W x 36"D x 84"H
750-10D*-^-B**	50kV AC	200mA	70"W x 36"D x 84"H
775-10D*-^-B**	75kV AC	133mA	70"W x 36"D x 84"H
710/875-	10kV AC / 75kV DC	4000mA AC / 13mA DC	70"W x 49"D x 80"H
730/830-	30kV AC / 30kV DC	167mA AC / 5mA DC	70"W x 36"D x 76"H
720/850-	20kV AC / 50kV DC	1000mA AC / 5mA DC	70"W x 36"D x 76"H
730/850-	30 kV AC / 50kV DC	333mA AC / 5mA DC	70"W x 36"D x 76"H
730/875-	30kV AC / 75kV DC	67mA AC / 13mA DC	70"W x 45"D x 93"H

***** *5 = 50Hz, 6 = 60Hz*
****** *1 = single bay test chamber; 2 = 2 bay test chamber; x = no test chamber, separate components*
^ *= Type of Partial Discharge Detector. Consult Factory.*
Note: *Other voltage and power rating combinations are available. Consult Factory.*

SCOPE OF SUPPLY

HV Power Source including regulator or amplifier, low voltage filter, and HV tank

Embedded Controls with touch screen

Measuring Capacitor, including measuring impedance

PD Detector and Calibrator

Test Chamber (if applicable)

HV Warning lamp

DI Remote Control Software

Manual, test report, and calibration certificate

CUSTOMER SUPPLIED

Input Power Cable

STANDARD OPTIONS

DSIT-# – Double Shielded Isolation Transformer.
 # = kVA of transformer

DI-FO-& - Fiber optic connection from cabinet to laptop (not supplied)
& = length of fiber optic cable

HH-700-HS – Hand operated interlock switch

HH-700-FS – Foot operated interlock switch

Casters-B – Set of casters for system

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