

*Accurate location of Partial Discharge in rotating machinery*



## Corona Probe, Model PPM-97

...off-line test for precise locating of sources of partial discharge

The Corona Probe (originally known as the TVA probe) is used to locate partial discharge in each slot with the winding energized phase by phase. It supplements on-line PD measurements by more precisely locating the PD to a particular slot and position. Alternatively it can be used as a stand-alone PD test for locating activity in the winding where no other PD information is available. The PPM-97 enables rapid positioning of PD activity and is generally used on all motors and generators with a phase to neutral voltage greater than 4.5kV.

The PPM-97 is a portable battery operated instrument for off-line detection of partial discharge in electrical machinery. The instrument is used with a ferrite probe and is designed to measure negative corona pulses. The corona probe test is a valuable aid for detecting the presence of abnormal partial discharging in stator coil insulation. It is one of the best tools for pinpointing the exact location of PD activity within the stator.

## Specification

<b>Continuous Wave Sensitivity</b>	0.9/RMS continuous at 5 MHz gives a full scale reading on the 100mA range, with batteries at 8 volts.
<b>Bandwidth</b>	0.5 MHz - 10 MHz
<b>Controls</b>	0 / 10 / 30 / 100 / 1000 mA Peak with off position
<b>Pulse Polarity</b>	Reads correctly only on negative pulses, or the negative swing of ringing pulses.
<b>Minimum Pulse Length</b>	35ns approx.
<b>Effect of Pulse Length</b>	Reads approximately 25% higher on a very long pulse (milliseconds) than on a 35ns pulse.
<b>Effect of Ring Pulse</b>	Oscillatory (ringing) pulses which ring within the bandwidth of a preamp will read higher than a short single pulse approaching the long pulse reading as the ringing time increases.
<b>PULSE Repetition Rate</b>	Reading is not affected by pulse repetition rate if greater than approximately 20pps
<b>Effect of Battery Voltage</b>	Reading decreases approximately 10% as the battery output drops from 9V to 7V. The instrument will operate satisfactorily if the battery voltage is > 6 volts.
<b>Dimensions</b>	3 1/2" x 6 1/8" x 1 3/4" (9cm x 15.5cm x 4.5cm) - meter only
<b>Weight</b>	445 grams (1lb) - meter only
<b>Connections: Input</b>	BNC receptacle
<b>Ground</b>	Metal 5 way binding post
<b>Batteries</b>	NEDA type 1604D 9volt long-life (2)

## Kit Contents

- PPM-97 Peak Pulse Meter
- Probe
- Ground Strap
- Operating Manual
- Carrying Case



## ADWEL International provides the following PDA products and engineering services:

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### CORPORATE HEADQUARTERS

ADWEL INTERNATIONAL LTD.  
60 Ironside Crescent, Unit 9  
Scarborough, Ontario, Canada  
M1X 1G4  
Telephone: 1 416 321 1988  
Fax: 1 416 321 1991  
e-mail: [info@adwel.com](mailto:info@adwel.com)  
Internet: <http://www.adwel.com>



### EUROPEAN OFFICE

ADWEL INTERNATIONAL LTD.  
Park House  
Greenhill Crescent  
Watford Business Park  
Watford, Herts WD1 8QU  
United Kingdom  
Telephone: 44 (0)1923 254433  
Fax: 44 (0)1923 218278  
e-mail: [adweluk@aol.com](mailto:adweluk@aol.com)