



## PARTIAL DISCHARGE PORTABLE ANALYZER CONSOLE

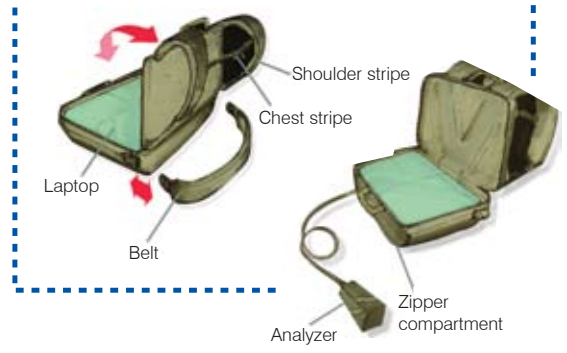
- ▣ Fast Processing Speed
  - ▣ Non- Intrusive
  - ▣ Simple to use
- ▣ Portable
  - ▣ Safe Operation
  - ▣ Non Destructive
- ▣ Proven Research-based Signal Processing Techniques
  - ▣ Acquired PD data can be saved to hard drive of the PD-PAC or any other portable media for further processing

### SPECIFICATIONS

DESCRIPTION	PERFORMANCE
Casing (Weight)	Approximately 4 kg.
Casing (Dimensions)	L (37),W (29), H (16) cm.
Casing material	Aluminum Casing Integrated with polyester carrier bag.
Electrical Power Input	2 X laptop batteries 1 X metal hydride (12V, 1.4 AmpHr) for PD sensor.
Acquisition Signal inputs	±20 mV to ± 20 V input range
Digital Signal Recording	Sampling rate 100MS/s. Internal storage buffer (4MB).
Computing and processing unit	Intel Core 2 Duo laptop 1.2Ghz. with 1GB RAM. 120GB Harddisk.
Sensors	Electromagnetic (EM) Sensor. 300 MHz bandwidth. Ultra sensitive to detect PD signal as low as 100uV with amplification.  Optional:- High Frequency Current Transformer (HFCT) Sensor Clamp on Split Core Type Output sensitivity in 2 V/A Maximum current (rms) – 5A Rise time – 0.7 ns High cut-off frequency (-3db) – 30Mhz
Software	Data Acquisition software (DataAcq) Data analysis software (PD-Fusion)



Carrier in operation mode



*All specifications are subject to change without prior notice*

### PD-Fusion™

Analyze PD with ease

#### >> Problems encountered with PD Analysis:

With the large number of different type of noise data present today, there are hardly any “Fixed” noise separation technique or techniques that can be used all the time under different site condition.” Very often, this will lead to misinterpretation of PD analysis if the wrong techniques are used.

#### >> Solution:

Therefore, the best solution is not to rely only on fixed techniques but rather an adaptive “selection of the best combination of noise separation techniques” for different site condition.

#### ▣ Hybrid Methodology

PD-Fusion™ software adopts an innovative “Hybrid” methodology in which multiple powerful noise separation techniques are fused together for superior PD analysis performance.

#### ▣ Adaptive Capability

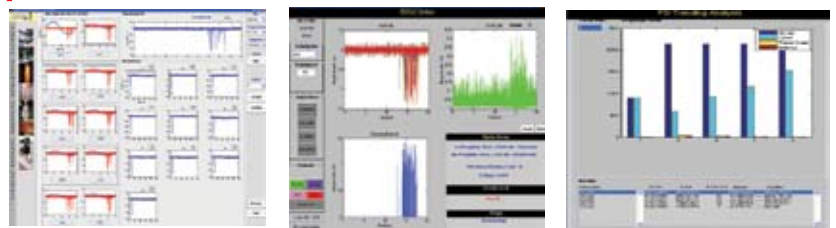
Unique technique of adaptive “selection of the best combination set of noise separation techniques” over fixed noise separation technique for different site condition.

#### ▣ Smarter

With the above mentioned technologies, PD analysis can be carried out very accurately in almost any kind of site conditions.

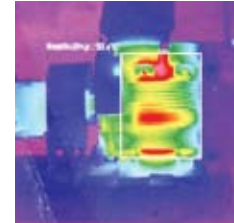
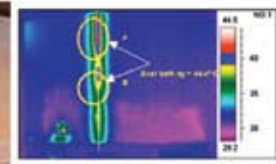
#### ▣ Simple

Easy to use Graphical Display coupled with automated processing and analysis makes it a relatively easy tool even for novice users.



## On-line Monitoring System Using FBG sensors to monitor the temperature of electrical systems.

- Sensors are totally passive and intrinsically safe
- No EMI and RFI issues
- Multiplexed systems - a single instrument can read over many sensors
- High accuracy and sensitivity
- Long reach
- Provide online and continuous monitoring
- Trending of temperature profile, System health monitoring is possible
- No calibration required over the life cycle
- Optimal layout ensuring failsafe operation
- Can be used for vibration, temperature and partial discharge monitoring etc, in one system.
- Low cost as compared to current systems which is limited in scope, reach and high cost of sensors.
- Built-in redundancy as any sensor failure can be covered by the other ensuring smooth operation throughout the system lifespan.



leaks

pipes

# Our range of SERVICES

We are committed to provide and promote Reliability Inspection Services and sales of reliability instruments for HV and LV equipment testing. We can provide non-invasive testing of air-conditioning systems, M&E installations using proven methods of :

## • Partial Discharge Measurement

Using PD Pac Spectrum Analyser for high voltage equipment of more than 3.3 KV without the need to shut down. Use of Partial Discharge Test to check oil quality before oil test.

## • Advanced Infrared Thermography for :

### - Electrical System :

LV Transformers, Sub Station 3.3 KV & below, Main Switch Boards, Bus Ducts, Chiller Switch Boards, Sub Boards etc.

### - Building :

Facades - falling tiles, moisture ingress and energy loss and Roof Inspection for leaks etc.

### - Mechanical Equipment :

Furnaces, Refractories, Chiller & Steam Pipes, Rotating Equipment bearings & motors, Heat Exchanger, Corrosion Leak Detection etc.

## • Advanced Vibration Diagnostics and Motor

Signature Analysis for rotating equipment such as AC motors, turbines, compressors, chillers, pumps etc.

## • AHU Performance Management & Condition

Monitoring program with maintenance for air handling units.

We provide **PD Certification Training**

## HOESTAR GROUP OF COMPANIES

- Hoestar Inspection International Pte Ltd
- Hoestar PD Technology Pte Ltd - PD PAC™
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