

# COMPUTER-AIDED PD MEASURING SYSTEM

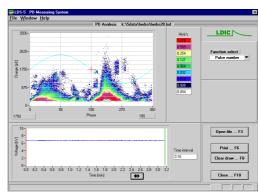




The measuring system LDS-5 is designed for computer-aided monitoring, recording and analysis of PD pulses detected by high voltage equipment using either the standardized coupling mode or the non-conventional field coupling mode.

The complete partial discharge (PD) measuring system LDS-5 consists of the PD measuring hardware (LDD-5/C or LDP-5), the computer (IBM compatible) equipped with the analog/digital converter card, the Matching Unit for adaptation of the input signals, as well as the required software for data acquisition and controlling the hardware (LDD-5/C).

Characteristical 2D representation of PD events



## **Program parts**

The program LDS-5 consists of different sections represented by there panels or windows, which can be activated through the main menu. Those are:

• Setup window for base settings of the measuring system

• Calibration PD calibration and observation of the measuring signal (Oscilloscope mode)

• Measuring On-line measurement and data storage (point display of maximum value of the PD pulses)

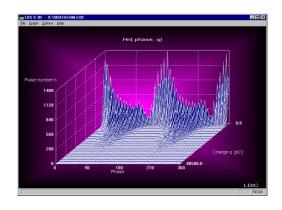
• Analysis Replay and evaluation of the measured data in 2D and 3D mode



## Representation possibilities

- Phase resolved replay of storaged PD events including elliptical display
- PD pattern display, phase resolved 2D representation
- 3D representation of PD events

Characteristical 3D representation of PD events



## **System Components**

- The PD measuring system LDS-5 consists of:
  - Notebook Computer with ADC card
  - Matching Unit for adaptation of input signals
  - Software for storage and evaluation of PD signals as well as for controlling the measuring range in the LDD-5/C
  - Carry case
- PD detector LDD-5/C or LDP-5 (not included in the specification of the LDS-5)

#### ADC card

The ADC consists of a PC removable card with data resolution of 12 bits. Two channels are used to digitize the PD data and the corresponding AC test voltage. Using a convert rate of at least 20 kHz per channel. Main features of the ADC:

• Type Multi channel analog/digital converter

ISA-Bus card for desktop PC

or

PCMCIA Type II for notebook

• Resolution 12 bit

Input voltage range
 Input impedance
 10 mV ... 10 V
 Input impedance
 1 MW / 50 pF

#### **Software**

The software is running under MS-Windows. Because the measurement and storage of the test results is performed on-line, the measuring duration is limited only by the free harddisk space.

## Optional features (not included in the standard version)

- Extended software for statistical data evaluation and basic features for PD fault indication
- Complete remote control of the system via telephone line (MODEM or ISDN) or a Local Area Network (IPX).
  The software includes Point-to-Point connections, remote control, filtertransfer, chat mode and terminal emulator
- Printer

### Modification

The measuring system is deliverable optional in a desktop or in a 19"-rack-mounted version.