



4 Channel Online Partial Discharge Monitoring System (Wallmount Enclosure)



Kev	Features	
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- High Resolution PRPD Pattern
- Noise Elimination trough Gating Channel and variable Frequency Range
- Designed for complete Commissioning without additional Hardware
- Local True Color Touch LCD

Applications	
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- Turbo Generators
- Hydro Generators
- Large Industrial Motors
- Windmills

General Description

The **TMS-5041** is a four channel partial discharge trending system with a true color LCD display showing all the necessary information for the commissioning and surveillance of high voltage rotating machines. The noise gating channel and variable Filters allows to separate noise from the pd signals. The **TMS-5041** shows actual partial discharge level for every individial channel (phase) on a bargraph, partial discharge activity in oscilloscope mode as well as color phase resolved partial discharge pattern. The touch functionality of the LCD display allows to parametrise, store and visualise the partial discharge signals without the use of any computer. Optionally a computer can be connected to store actual configuration and partial discharge results. Eight optional 4-20mA input channels allows to record machine operation conditions as MW, MVA, temperatures etc. together with the partial discharge signals. The optional Modbus RTU interface allows an easy integration into the exisiting SCADA/DCS system. Individual 4-20mA and relais outputs per channel are available. This make the **TMS-5041** the ideal cost effective partial discharge monitoring system for permanent installation.

Ordering Information

Order Code:

17.5041.AAA.BBB.CCC.DDD

AAA: Enclosure type:

065: IP65 Protected Wallmount Enclosure 019: 19" Rackmount Enclosure (3HU)

035: DIN Rail mount (35mm)

BBB: Power Supply:

264: 85-264VAC, 50/60Hz or 90-375VDC

024: 18-36VDC 048: 36-72VDC

CCC: Communication Interface

485: Modbus RTU Interface (optional)

TMS-5041W

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Technical Data	

\geq Data Acquisition of Partial Discharge Channels $_$

PD Input Channels (Multiplexed + Gating): 4+1

Acquisition Time Intervall:

1 to 600 sec/ch

Frequency Range *1 Selectable LP Filter:

40KHz to 5MHz

Sensor Compatibility:

80pF - 10nF²⁾

Selectable HP Filter: Signal Gain (HW): 800kHz to 300MHz 40dB Coupling Capacitors: RF CT's:

ves²⁾

Frequency Range of complete measurement chain depends on selected PD sensor

Sensitivity of measurement circuit depens on selected sensor type

Voltage References _____

Reference from Coupler 10mV to 30VACrms Frequency Range: 0.1 to 200Hz External Voltage Reference: From Power Supply:

max 260VAC max 260VAC²⁾

2) only available on AC Power Supply Version

Interfaces

Relais Contacts NO/NC System OK+CH 1-4)
Analogue Output: 4x 4-20mA (1 per Ch)

Modbus RTU::

RS-485

Analogue Input (OP Parameters): 8x4-20mA

USB 2.0:

PC communication

Display _

Dimension: Resolution: 4.3" Color Depth: 480x272pxl Touch:

24bit Resistive

Local Results

Phase Resolved Partial Discharge Pattern: Resolution: 256x256 Bargraph:

4 (1 per Channel)

Nesolution. 250

Trend:

max. 1 Year

Color:

black & white

Event Logging:

yes

Mechanical Dimensions

Dimensions (L x W x D)

Protection Class:

IP65

Weight:

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Contact

Sparks Instruments SA

Bodematta 12, 1714 Heitenried Switzerland

Phone:

+41 (0)78 889 03 53

Email: Web:

sales@sparksinstruments.com www.sparksinstruments.com Worldwide Exclusive Sales Representative & Tech Support



Route des Daillettes 6 1709 Fribourg, Switzerland Phone: +41 26 401 84 56 Email: sales@mc-monitoring.com

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