

LEAFLET

Introducing eDOC

Oil diagnostic device for smart transformers



Choose our Oil Diagnostic device type eDOC, measure the presence of moisture & hydrogen inside the transformer oil continuously and take informed decision about the asset maintenance needs.

As part of our MeDICA solution it can also serve as a bridge to all other connected eDevices.

Transformer oil's primary functions are to insulate & cool a transformer.

The oil must be stable at high temperatures and has excellent electrical insulating properties to withstand electrical & mechanical stresses and assure safe operation of the transformer.

To make sure the oil is suitable for use, the end-user must periodically control its properties.

The presence of dissolved gases and moisture is an indicator of an abnormal condition and further investigation is needed to determine the next course of action.

Why buy

Connectivity

- Data aggregator & storage for eDevices and third party devices
- Web interface for remote control in accordance with cybersecurity assessment
- USB port for direct data downloading and uploading on-site

Serviceability

- Plug & play installation
- Oil drain valves for easy & safe oil sampling and discharging on-site
- Interactive display with icons for easy threshold set-up & functional test on-site

Safety

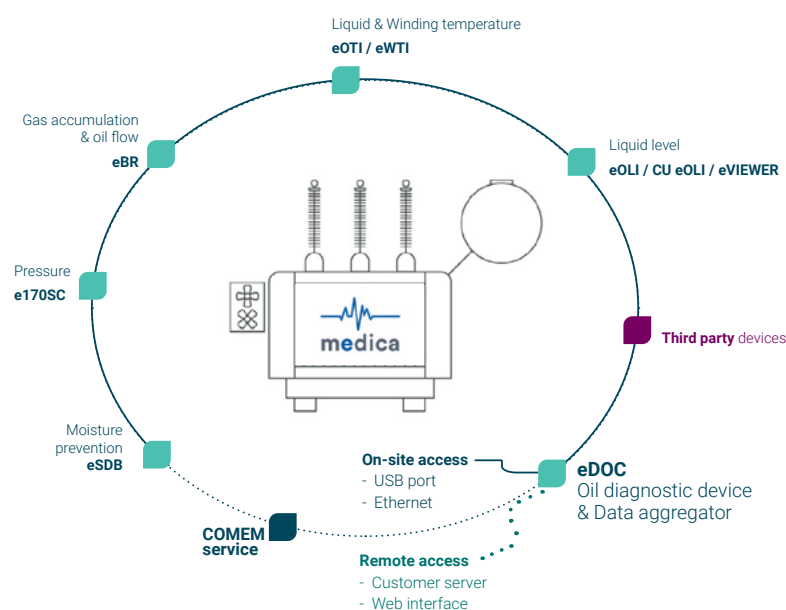
- Suitable for all applications, and environments
- Hydrogen reading is not sensible to presence of other gases
- Continuous testing on fresh oil samples

TECHNICAL FEATURE AT A GLANCE

Type	eDOC-H	eDOC-HM
Monitoring of	Hydrogen (H ₂)	Hydrogen (H ₂) & Moisture (H ₂ O)
Connectivity	Data aggregator for eDevices and third-party devices Embedded Web Interface	Data aggregator for eDevices and third-party devices Embedded Web Interface
Input	3 x 4 - 20 mA, Modbus RTU	3 x 4 - 20 mA, Modbus RTU
Output	USB-A 2 x dry contacts (H2, malfunctioning) 2 x 4 -20 mA (H2, Temperature) RS485 2 x RJ45a Fiber Optic LED and display	USB-A 3 x Dry contacts (H2, H2O, malfunctioning) 3 x 4 - 20 mA (H2, H2O, Temperature) RS485 2 x RJ45a Fiber Optic LED and Display
Protocols	Modbus RTU; Modbus TCP/IP; DNP3.0; IEC 61850	Modbus RTU; Modbus TCP/IP; DNP3.0; IEC 61850

MECHANICAL FEATURES & AMBIENT SPECIFICATIONS

Interface to transformer	1.5 NPT male thread (standard); 1" NPT, EN flanges (on request)
Corrosion class	C5-M (standard), CX (on request)
Degree of protection	IP66, IP67 IEC/EN 60529
Ground	External mechanical ground
Dimensions	162 x 255 x 355 mm
Weight	8,5 kg
Vibration	Class 4M6 in agreement with EN 60721-3-4
Seismic	cl.0, level II in agreement with EN 60068-3-3
Operating ambient temperature	-40°C to +80°C (-40°F to +176°F)
Operational oil temperature	-40°C to +120°C (-40°F to +248°F)
Oil pressure	0 to 1000 kPa / 0 to 10 bar / 0 to 145 psi



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