

# MICRO-OHMMETER MR 8050

for highly inductive Test Objects up to 800 MVA

Transformer Measuring  
Devices

Winding Resistance Meters

With the **MR 8050** resistances highly inductive windings of transformers, motors and reactors can be measured. (range 100  $\mu\Omega$  with 0.01  $\mu\Omega$  resolution up to 6 k $\Omega$ ).

The performance of the test objects can be up to 800 MVA or even more.

The magnetic loading of a transformer is performed quickly using a high loading voltage (60V). This is important for time critical measurements (cooling curves).

The unloading of the transformers core is very fast, very safe, as the energy is total destroyed in the **MR 8050**.

The temperature of the test object can be preset or measured using a PT100 probe. The resistance is calculated for 20°C using the temperature coefficient for copper or aluminium.

Heat-loss measurements with preset time intervals are possible. The resistance at t=0 (disconnection of load) is shown as result of the internal regression algorithm.

Two windings (mostly HV and LV) can be measured simultaneously in DUAL measuring method.

The **MR 8050** also features automatic tap-changer control for measuring different taps without interrupting the measuring current.

Included is the testing of the OLTC characteristic current vs time and the resulting transition time.

Cooling curves and OLTC results can be plotted and printed via PC by using our XFER-software.



## Features

- 2 channels for DUAL measurements
- Measuring time extremely short due very fast uploading
- Discharge time typ. 1/10 of uploading time
- Heat - loss measurements including regression algorithm
- LCD-Display with 240 x 128 pixels with backlight
- USB standard and RS232C 9600 baud
- PT100 connector for PT100 temperature probe
- Tap changer connector for automatic tap changer control
- OLTC testing current vs time characteristics
- Warning system connector for separate warning light
- Internal test storage for up to 1000 measurements
- Inputs full protected against static and transient voltages

## Technical Data

Object connection:	2 current outputs, 4 potential inputs (2 channels)
Resistance auto range:	100 $\mu\Omega$ up to 6000 $\Omega$ (autorange)
Max. Current selectable:	10A, 60A; actual value depends on total resistance
Resolution:	0.01 $\mu\Omega$ e.g. 123.71 $\mu\Omega$
Max. Measuring Error:	$\pm 0.1\%$ RDG. $\pm 0.05\%$ F.S.
Max. output voltage / current:	60V pure DC / 60A pure DC
Total output power:	max.450VA @ 90 ... 264V mains
Max. capacity:	800 MVA transformers
Interface:	USB and RS232C 9600 baud (auto switch)
Built-in thermal printer:	Paper 58mm width, easy handling
Environment:	-10° to +50°C working, -25° to +70°C storage
Rel.Humidity:	max. 95 % not condensing
Power supply (Mains):	90...264V, 6.5A PFC
Housing:	ABS rugged case, water proof
Size and weight:	490x400x190mm approx. 15 kg
Safety and EMC:	CE, IEC-1010-1, EN55011B, EN61000-3-2,-3, ENV50204

AGENT

Made in Germany