

An appetizing new product: FRANEO 800

With FRANEO 800, we bring the next generation of our FRAnalyzer to the market. Michael Rädler, product manager for FRANEO 800, was available to answer some questions just in time for the launch.



OM: Hello Michael. FRANEO 800, the successor to the established FRAnalyzer, was introduced at the German User Meeting 2015. What does the name actually stand for?

Michael: FRANEO is composed of 'FRA', which stands for 'Frequency Response Analysis', and 'neo', Ancient Greek for 'new'. This is meant to reflect the goal we set ourselves with the project; we didn't just want to develop a 'state of the art' device, but rather to introduce the next generation of sweep frequency response analysis (SFRA) test devices with this.

A nice goal – what specifically has been improved in comparison to the existing FRAnalyzer?

On the hardware side, we've taken a great step forward. FRANEO 800 is the product of a highly motivated development team. Through technical refinements such as the measurement concept that was developed, we achieve a high measurement accuracy and the highest dynamic range in the industry. We took the customer wishes that we received for FRAnalyzer to heart. Ultimately, we wanted to develop the ideal device for SFRA testing.

Are there also changes in the software?

Yes, of course. We are now part of the Primary Test Manager™ (PTM), the software platform that is already used for diagnostic tests and condition analysis with CPC 100 and CIBANO 500.

And how specifically does that help users?

They benefit from the PTM Guided Workflow, which guides them through the testing procedure step by step. This allows customers with less experience also perform standard-compliant and reproducible SFRA tests.

How do you handle existing FRAnalyzer data or test data from other test devices?

For reliable assessment of the mechanical condition of a transformer, change in the measurement data over time is highly relevant. Therefore, our top objective was to ensure convenient migration of legacy data into PTM in order to allow comparison with earlier measurements. For new customers in particular, we ensured that PTM is compatible with data formats of other test devices.

Michael, in a nutshell, why is FRANEO 800 the ideal SFRA test device in your opinion?

With FRANEO 800, we took what had been tried and tested and made it even better: it's a compact, reliable, robust and precise test device and offers users optimal support for SFRA testing. OMICRON also represents excellent service and expert knowledge.

Thanks a lot for the interview, Michael.



FRNEO 800

- > Wide dynamic measuring range (> 145 dB)
- > Reproducible results thanks to innovative connection technique, based on IEC 60076-18 and IEEE C57.149 standard
- > Guided workflow for test set-up, execution and assessment for easy analysis without expert knowledge
- > Fast measurement times due to intelligent sweep algorithm
- > Small and light-weight equipment guarantees optimum usability

 www.omicron.at/franeo800

Transformers must function reliably. In order to ensure that they still function properly after transport, earthquakes or short circuits, core and coils must be tested for mechanical or electrical changes in accordance with the current IEC 60076-18 and IEEE C57.149 standard. When using FRNEO 800, the successor of the proven FRAnalyzer, you can test your transformer for such changes in no time at all.

Proven method

As with its predecessor, FRNEO 800 looks for mechanical and electrical changes by analyzing the frequency response (sweep frequency response analysis, SFRA). This is the most reliable testing method for recognizing these changes. The method is also fast and cost-effective, given that the active component of the transformer does not need to be removed.

Improved hardware

FRNEO 800 has a newly developed and highly robust housing, which is ideally suited for on-site testing. The output voltage can be set anywhere between 0.1 V_{pp} and 10 V_{pp}. This means you can easily compare your measurements with

previous tests – irrespective of the output voltage you used to run them. The higher maximum output voltage even allows you to take measurements in areas with high levels of interference without any problem.

«With FRNEO 800, we took what had been tried and tested and made it even better.»

A higher signal-to-noise ratio (SNR) and an improved clamp design make the tests more reproducible. The integrated battery

also allows you to carry out tests in areas without a power supply.

Intuitive use

Using FRNEO 800 is easy with the Primary Test Manager™ (PTM) software. Once the measurement clamps have been connected to the transformer, PTM checks the ground loop.

The high-performance database makes it easy and fast for you to manage your test results. With just the click of a button, PTM also lets you compare your measurement with matching values from a reference measurement in the database. This means you save valuable time when testing your transformers. 