

## NFA-SERIES

### 3D NF Analyser with Data Logger

**The innovative concept for the field strength measurement technology within the building biology**

The NFA 1000 requires only very few settings and is able to process hundreds of thousands of pieces of information per second in the background, allowing you to capture the most important parameters at one glance in the process of measuring.

At the same time, all relevant measurement and instrument data are simultaneously and continuously recorded onto a standard SD memory card, linked with the possibility of dictating audio notes „live“ directly into the device. A minimum of effort will therefore provide a maximum of information for a detailed analysis on your PC later on.

This leaves you with more time for the essential task:

The best possible consultation of your customer.

The PC evaluation software „NFA-see“ included in the scope of supply requires no installation, impressively displays the measuring results, supplies statistical evaluations in real time, and provides all information you need for your measurement protocol in a flash.



## The measurement: „Less is more“!

The NFA only displays the information important for the process of measurement:

- A default display indication is the 3D-total pollution.



- Differently coloured LEDs parallelly show the relevant frequency components and a limit value indication.
- Measurement algorithms and audio notes allow for an extremely rational measurement process.
- The NFAs indicate and correct absurd settings.

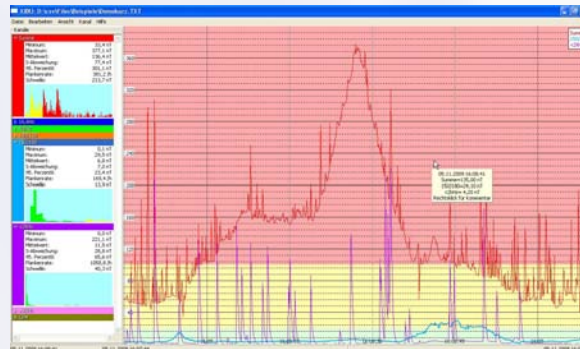
## The evaluation: „More is more“!

- In order to avoid an uncomplete protocol on your PC due to a lack of details, the NFA is able to capture the frequency and axis information simultaneously, continuously, and without „blind spots“.
- The high „resolution“ of 10 data records per second as well as the revolutionary PC evaluation software NFA-see allow for a completely new aspect of the much discussed phenomenon of „dirty power“.

## PC Software within the scope of supply

### NFAsee: All at one glance !

The innovative PC evaluation software: An in-house product developed specifically for the NFA, opening up all possibilities of the NFA to the user.



This programme permits a detailed view and analysis of the recorded data, backed up also by the integrated audio notes recorded by the NFA during the process of measurement.

Further highlights:

- supplies statistical evaluations of the selected range in real time
- supports the efficient elaboration of informative measurement protocols.

### NFAset: Everything under control !

You can define the standard settings you prefer for your device: „Simple Operation“ or „All Details“, whichever suits you most. And you can easily control all functions such as the measurement unit or the pre-programming of longterm recordings.

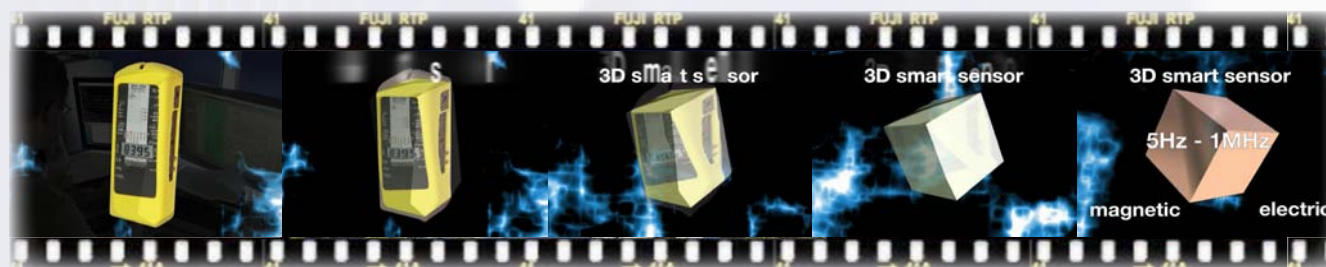
... patented high-tech  
... trend-setting innovations !



## Potential-free 3D measurement without the „cube“ - Is that possible?

Yes, indeed, it is - with the help of two patents and a few further ideas, we have managed to literally „square the circle“:

- Standardised active sensor covers compensate the differing sizes of the field plate pairs.
- The utilisation of parasitic effects of the sensors helps compensate the shortening effect of the long axis.



# NFA Series

3D LF analysers with data logger

Made in Germany

3D LF analysers	NFA 30M	NFA 400	NFA 1000
<b>Frequency ranges</b>			
Frequency range (from ... to)	16 Hz 32 kHz	5 Hz 400 kHz	5 Hz 1MHz
Frequency selective filter 16.6   50/60   100/120   150/180   Rest < 2kHz   >2kHz	✓	✓	✓
<b>Magnetic flux density</b>			
Measuring range "M" in Nanotesla (alternatively displayed in Milligauss)	1 - 19999 nT (up to 400 µT upon request)		
Internal 3D sensor (isotropic point < 3cm <sup>3</sup> ) (pat. pend.)	✓	✓	✓
<b>Electric field strength</b>			
Measurement range in Volt per meter (V/m)      Optional range extension upon request	-	0.1 to 1,999 V/m	
Internal potential-free 3D-E-field sensor (Patent DE 10 2007 025 911)			✓
Internal potential-free 1D-E-field sensor in Y-direction		✓	
Internal sensor bound to earth potential in Y-direction (TCO Recommendation)		✓	✓
Input for the measurement of capacitive body coupling acc. to SBM (hand electrode opt.)		1 - 19,990 mV	
<b>Optional sensors ("CH 4")</b>			
TCO compliant E-field sensor (diameter 30 cm, mountable)		opt.	opt.
Magnetostatic sensor		opt.	opt.
Electrostatic sensor		opt.	opt.
Input for AC or DC signals (for instance for the connection of an HF analyser)	✓	✓	✓
<b>Signal analysis</b>			
True RMS	✓	✓	✓
True RMS hold / Peak hold	✓	✓	✓
Peak value, broad band (true peak of the wave)	✓	✓	✓
<b>Display features</b>			
Large LC display (4 digits), also easy to read from afar	✓	✓	✓
Frequency indication by differently coloured LEDs or by numerical value		✓	✓
Acoustic signal (Geiger-counter-effect, volume adjustable)		✓	✓
<b>Internal data logger</b>			
Sampling rate: 110,000 samples/sec., maxima are saved up to 10 times/sec onto the SDHC card. Simultaneous and frequency selective for XYZ and CH4, i.e. without "blind spots".	✓	✓	✓
Voice recorder		✓	✓
Configuration and evaluation software for PC: Innovative graphical and statistical functions, frequency- and axis-specific	✓	✓	✓
Instrument "lockable" to assure safe recordings in the case of unauthorised access	✓	✓	✓
<b>Scope of supply and optional accessories</b>			
Internal Li-Ion battery pack (for up to 48 h "full speed"-recordings, NFA 30M more than 48h)	✓	✓	✓
AC-adaptor for quick loading or for mains supply (unlimited recordings possible in this case)	✓	✓	✓
Terminal nut for the stand integrated at the bottom of the housing		✓	✓
Grounding cable		✓	✓
Floating potential telescopic rod (PM4s) or instrument holder (PM1)		opt.	opt.
Compact plastic transport case K5	✓	✓	✓

Rev. 4.0 as of February 2011, subject to change without prior notice