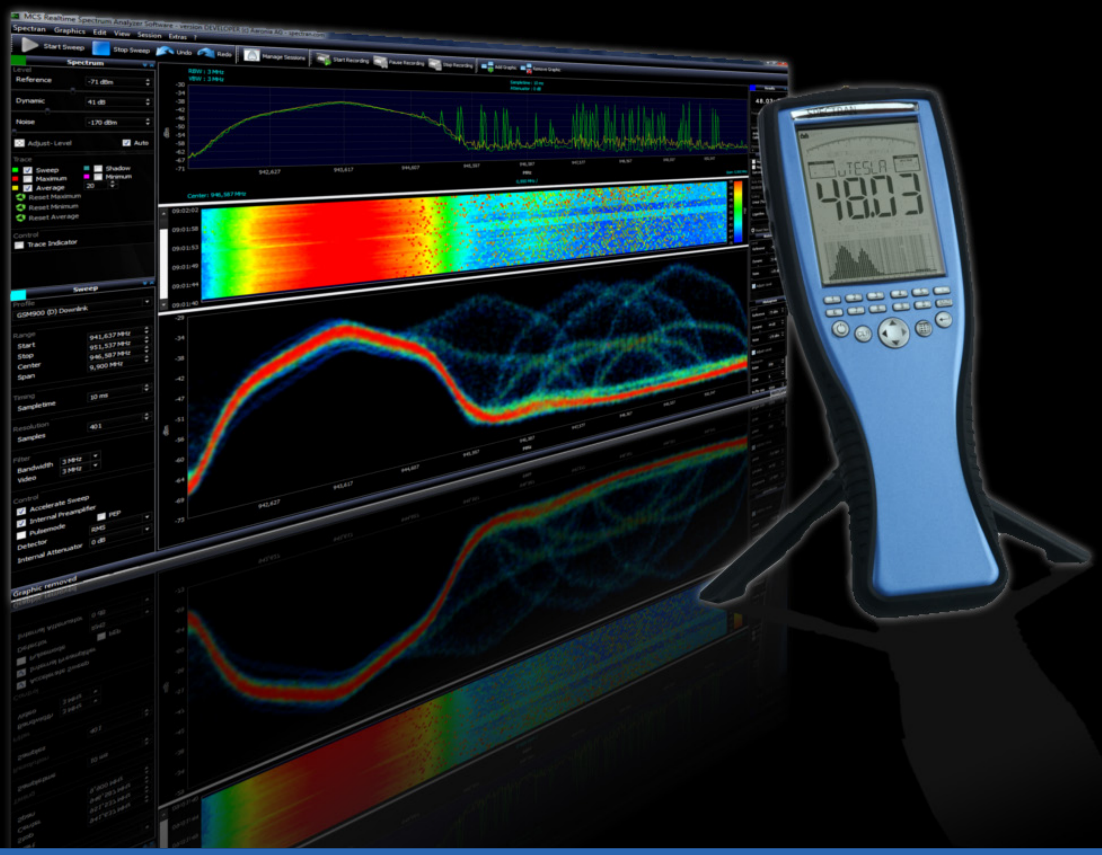
安诺尼AARONIA

SPECTRAN NF HANDHELD

1Hz to 1 MHz (30 MHz)

低频电磁辐射分析仪NF-5035



Highlights:

- 频率范围: 1 Hz up to 30 MHz
- 精度: 3%
- 重量仅有420 g
- 配套MCS软件

AARONIA AG®

WWW.AARONIA-CHINA.COM

MADE IN GERMANY

Specifications

SPECTRAN NF-5035 (1 Hz to 1 MHz / 20 MHz / 30 MHz)

- 名　　称： 手持式电磁辐射测试分析仪
- 型　　号： SPECTRAN NF-5035
- 频率范围： 1Hz to 1MHz
- 可扩展频率范围： 选项008扩展至20MHz
- 可扩展频率范围： 选项010扩展至30MHz
- 磁场测量范围(Tesla)： 1pT to 500µT (50Hz)
- 磁场测量范围(Gauss)： 10nG to 5G(50Hz)
- 电场测量范围： 0.1V/m to 5kV/m(50Hz)
- 模拟输入 200nV to 200mV (典型)
- 最小采样时间： 10mS
- 分辨率带宽(RBW)： 0.3Hz to 1MHz (1-3-10 step)
- 可用单位： V, V/m, T, G, A/m
- 检波器： RMS、Min/Max
- 解　调： AM,FM
- 输入(Input)： 50欧姆SMA射频输入
- 音频： 内置扬声器（具音量控制和标准2.5mm插孔）
- 精度： 3%（典型）
- 数据记录器： 64K（选件001可扩展到1MB）
- 数据接口： USB2.0/1.1
- 尺寸(L/W/D)： 250x86x27 mm
- 重　　量： 430g
- 质　　保： 2年

年度最佳产品

Our 3D magnetic-field measurement coil with homogeneous centre w on the first price of Europe´s biggest electronic newspaper “ Elektroni k” in the category passive components.

This coil is installed in each NF-SPECTRAN® unit.

The SPECTRAN NF-5035

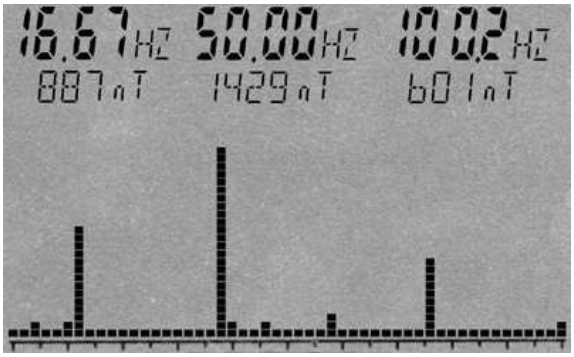
紧凑设计，轻巧便携

Measurement of electric and magnetic fields in this price range has never been this professional.
Find radiation sources in your surroundings. Find their respective frequencies and signal strengths, including direct display of exposure limits. This used to be impossible in this price cate go-ry, professional units often costing several thousand euros and being excessively complicated in handling. The highly com plex calculations in spectrum analysis incl. exposure limit calcu lation is being performed, unnoticed in the background, by a hi gh-per-formance DSP (digital signal processor). This ultra-fast proces-sor even allows, depending on the settings, REAL-TIME display with a NF-5035 (could you ask for more?).

频谱分析

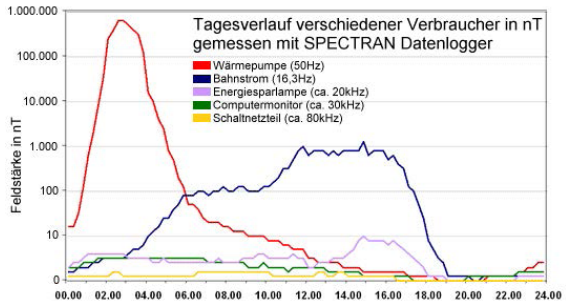
Professional EMF measurement devices use a frequency dependant measurement approach, the so-called spectrum analysis. In a certain frequency range, the individuals signals and their respective strengths are being broken down, for example into a “bargraph” display (see SPECTRAN® screenshot on the right). The height of the individual bars represents the corresponding signal strength. For the 3 strongest signal sources, SPECTRAN® can automatically displays the frequency and signal level, thanks to its “Auto Marker” feature. Of course, you can also setup the filter width and the frequency range to be analysed as you like.
In the EMF (LF) spectrum shown here, a frequency range of approx. 20 Hz to 60 Hz from left to right is being analysed. During analysis, the Auto Marker feature has determined - fully automatic - two main signal sources:

Signal#1=30Hz at 45µT
Signal#2=50 (mains power) at 75µT.



长期测量（数据记录功能）

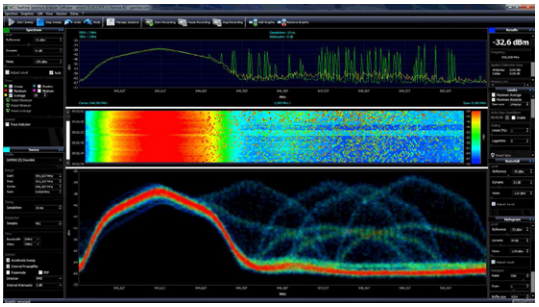
SPECTRAN® measurement devices with data logger allow long-term recordings of measurement results over a freely adjustable period of time. This is particularly indispensable for serious evaluation of exposure by appliances and machinery which have a changing power consumption or radiation strength over time. Examples for these include railroads, power lines and plants, but also home appliances and their respective power cables, and various high-frequency transmission facilities like mobile phone transmission towers, mobile phones, radar etc. Depending on the time of day, considerable variation of exposure can occur (see attached graphics). Without long-term recordings, MASSIVE misinterpretation of total exposure can occur. With long-term data logging using SPECTRAN®, the daily variation of exposure can be recorded and analysed. Thus, the actual total exposure can be evaluated precisely. With this functionality, you can even discover sporadic EMC problems which would otherwise be very hard to detect.

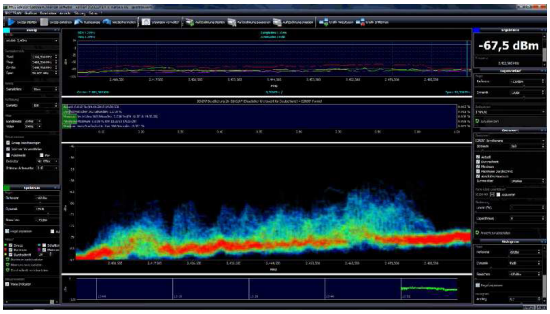


The SPRECTRAN NF-5035

免费PC分析软件“ MCS”

The cross-platform Spectrum Analyzer Software MCS for Windows, Linux and MAC OS shows the full potential of the SPECTRAN® units. The measurement results and controls work in realtime, which means without any delay between the reception and the display of the signal on a monitor.





- Multi-device capability, remote control of several SPECTRAN®.
- These can be controlled on a single PC.
- Works on all major operating systems like Mac OS, Linux and Windows
- Real-time remote control function with all SPECTRAN® spectrum analyzer via the integrated USB port
- Unlimited number of limit displays e.g. EN55011, EN55022, etc. including display of ICNIRP limit lines and limit-bar graphs
- Multi Window Support
- Powerful undo feature
- Channel and provider display
- Custom skins and color settings
- Reporting and recording function
- and much more

新标准：三维(3D)测量

Mismeasurement caused by wrongly adjusting the measurement device in space or troublesome and complex 3D calculations with a calculator are a problem of the past from now on, thanks to SPECTRAN® EMF (LF) measurement devices. All SPECTRAN® EMF measurement devices can measure magnetic fields directly in 3D! The SPECTRAN® NF-5035, field strengths of the individual X, Y and Z axes can even be shown seperately. This has become possible thanks to the newest development from the Aaronia laboratories: Our high-tech REAL 3D miniature sensor coil. Consisting of a specially crafted nylon base with 3 independant windings made of ultra-thin, 0,05 mm! wire, it impresses with its extremely high sensitivity. It allows measurement of magnetic fields in all 3 spacial dimensions. The signal processor (DSP) of the SPECTRAN® performs the resulting highly complex calculations. You receive 3D measurement results which can otherwise only be achieved by using highly professional equipment.

Scope of delivery

- 低频电磁辐射分析仪SPECTRAN NF-5035
- 3000mAh电池
- 便携箱
- MCS软件 (可下载)
- USB连接线
- Protection Rubber橡胶保护套
- Exhaustive manual操作手册

Options for SPECTRAN® NF-5035 (S)

Optional modifications to the SPECTRAN® NF-5035 include:

Option 001: 1 MB memory expansion

This internal memory expansion is a MUST-HAVE particularly when using the data logger, as the standard capacity can quickly become exhausted in this mode. The memory expansion provides space for more than 10,000 logs, while the standard memory will only accomodate approximately 100 of them. Standard memory size is 64K.

Order/Art.-No.: 111/003

Option 005: 12 Bit Dual DDC frequency filter

Already installed in: NF-5035 and NF-5035S

This cutting edge 12 Bit DDC frequency filter allows extremely fast, crisp and accurate frequency filtering, while at the same time drastically enhancing the sensitivity. As an example, magnetic fields can (depending on their frequency) still be measured down to 1 pT (0.001 nT), compared to 0.1 nT without the option.

Option 008: 20 MHz frequency extension

This 20 MHz frequency extension option vastly enhances the frequency range of the NF-5035. Amongst others, it brings the ADSL and 13.56 MHz RFID frequency bands in range. What's more, we are already developing a PC-based analysis software for decoding RFID.

The maximum frequency range of the NF-5035 without option 008 is 1MHz.

Order/Art.-No.: 111/001

Option 010: 30 MHz frequency extension

Our 30 MHz frequency extension extends the frequency range to the absolute maximum. The new frequency range is 1 kHz - 30 MHz. Amongst others, it even allows measurement of VDSL2. The higher clock frequency of the DDC provided by this option is a MUST HAVE for technicians and authorities needing ACCURATE assessment of signal sources of up to 30 MHz.

The maximum frequency of the NF-5035 without option 010 is 1 MHz.

Order/Art.-No.: 111/002