



Rev 1.5  
02.08.2011

## USB Spectrum Analyzer X-Series

USB controlled Spectrum-Analyser Series - Extremely high Sensitivity (max. -170dBm/Hz)  
Wide Frequency Range from 1Hz - 9,4GHz (EMF & RF)

### Included in Delivery:

- ◆ USB-Spectrum-Analyzer in a milled aluminum housing
- ◆ **PC/MAC/LINUX USB-Analyzer-Software on CD**
- ◆ OmniLOG 90200 radial isotropic Antenna (only HF V4 X)
- ◆ International Power Supply incl. Adapterset
- ◆ Aaronia USB-Cable
- ◆ Aluminum Transportcase
- ◆ Cleaning Brush



Made in Germany



# Specifications

## SPECTRAN® HF-6060 V4 X (10MHz - 6GHz)

- ◆ 14Bit Dual-ADC
- ◆ DDC Hardware-Filter
- ◆ 150 MIPS DSP (CPU)
- ◆ Frequency range: 10MHz to 6GHz
- ◆ AVG Noise Level (DANL): -135dBm(1Hz)
- ◆ AVG Noise Level (DANL) PreAmp: **-150dBm**(1Hz)
- ◆ AbsMax Level: +10dBm
- ◆ Lowest possible SampleTime: **1mS**
- ◆ Typ. accuracy: +/- 2dB
- ◆ Standards-conformant exposure limits (ICNIRP, BGV B11, BImSchV etc.)
- ◆ Dimensions (L/W/D): (210x140x25) mm
- ◆ Weight: 700gr
- ◆ **Warranty: 10 years**

## SPECTRAN® HF-6080 V4 X (10MHz - 8GHz)

- ◆ 14Bit Dual-ADC
- ◆ DDC Hardware-Filter
- ◆ 150 MIPS DSP (CPU)
- ◆ Frequency range: 10MHz to **8GHz**
- ◆ AVG Noise Level (DANL): -145dBm(1Hz)
- ◆ AVG Noise Level (DANL) PreAmp: **-160dBm**(1Hz)
- ◆ AbsMax Level: +10dBm
- ◆ Lowest possible SampleTime: **1mS**
- ◆ Typ. accuracy: +/- 2dB
- ◆ Standards-conformant exposure limits (ICNIRP, BGV B11, BImSchV etc.)
- ◆ Dimensions (L/W/D): (210x140x25) mm
- ◆ Weight: 700gr
- ◆ **Warranty: 10 years**

## SPECTRAN® HF-60100 V4 X (1MHz - 9,4GHz)

- ◆ 14Bit Dual-ADC
- ◆ DDC Hardware-Filter
- ◆ 150 MIPS DSP (CPU)
- ◆ Frequency range: 1MHz to **9,4GHz**
- ◆ AVG Noise Level (DANL): -155dBm(1Hz)
- ◆ AVG Noise Level (DANL) PreAmp: **-170dBm**(1Hz)
- ◆ AbsMax Level: +20dBm
- ◆ AbsMax Level: **+40dBm** (Option)
- ◆ Lowest possible SampleTime: **1mS**
- ◆ Typ. accuracy: +/- 1dB
- ◆ Standards-conformant exposure limits (ICNIRP, BGV B11, BImSchV etc.)
- ◆ Dimensions (L/W/D): (210x140x25) mm
- ◆ Weight: 700gr
- ◆ **Warranty: 10 years**

## SPECTRAN® NF-5030 X (1Hz - 1MHz/30MHz)

- ◆ Incl. Option 005 (12 Bit DDC Frequency Filter)
- ◆ **65 MSPS**
- ◆ Frequency range: 1Hz to 1MHz (optional **30MHz**)
- ◆ Typ. level range Analog in: **200nV** to 200mV / -150dBm (Hz)
- ◆ Typ. accuracy: 3%
- ◆ Superfast FFT spectrum analysis
- ◆ High-performance DSP (Digital Signal Processor)
- ◆ DIN/VDE 0848 Exposure limit calculation!
- ◆ True RMS signal strength measurement
- ◆ Average (AVG) measurement
- ◆ Dimensions (L/W/D): (210x140x25) mm
- ◆ Weight: 700gr
- ◆ **Warranty: 10 years**



# Description



## Spectrum Analysis from 1Hz - 9,4GHz

Find radiation sources in your surroundings. Find their respective frequencies and signal strengths, including PC-Software exposure limits display.

Due to the design and the associated shielding (3mm Aluminum housing) the Spectran X Desktop Analyzer is perfectly suitable for EMC measurements.

The highly complex calculations in spectrum analysis incl. exposure limit calculation is being performed by a highend Analysis Software which runs on almost all platforms (Windows, MAC OS, Linux).

**Accurate, sensitive, affordable and beautiful exterior - what more could you ask?**

## Highlights

Each Spectran X Desktop Spectrum Analyzer combines the following Highlights:

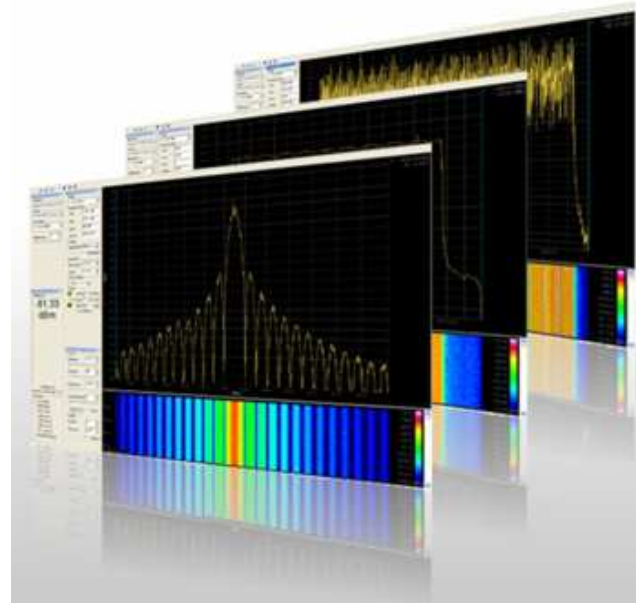
- ◆ 100% controlled by USB
- ◆ 100% powered by the external power supply
- ◆ Incl. OmniLOG 90200 Antenna (perfect to measure GSM or UMTS)
- ◆ 50 Ohm SMA input
- ◆ Internal speaker (which can be switched off)
- ◆ Audio out for the use of PC based FFT analyzer software
- ◆ Very good shielding (3mm aluminum housing)
- ◆ Highend, milled aluminum housing made of one piece (no cast part)



## Professional PC analysis software (included)

The included PC PRO Analyzer Software for the Spectran X Desktop Spectrum Analyzer offers a huge functionality:

- ◆ **MULTI-device capability!** Remote control of several SPECTRAN units. These can be controlled and their data displayed at once on a single PC.
- ◆ **HIGH-RESOLUTION!**, freely scalable, coloured spectrum display with falloff function..
- ◆ **Display of channel identifiers!** for EXACT identification of providers. Channel numbers etc. freely programmable and extensible!
- ◆ Up to 10! markers with frequency and level display.
- ◆ Intuitive zoom control with very comfortable frequency adjustment.
- ◆ High quality "waterfall"-display with TIMECODE. Colour scale freely configurable. Size freely scalable. Optional display of data DIRECTLY ON TOP OF THE GRAPH by pointing with your mouse and CTRL-clicking!
- ◆ **High-resolution SLOT ANALYSER with 3D display!**
- ◆ **SUPER-LOGGER:** ALL data can be written to disk continuously. File format is readable by spreadsheet applications, for creating custom reports, etc.
- ◆ Freely positionable windows for comfortable entry of frequency, RBW, sweeptime etc. etc.
- ◆ **Various pre-defined profiles** for DECT, UMTS, GSM, Wlan etc. etc. for instant recall. Incl. optimal parameters and extensive channel information! Freely programmable and extensible!
- ◆ Independant main display with SIMULTANEOUS display of dBm, dB $\mu$ V, V/m, W/m<sup>2</sup> and A/m, each with AUTORANGE. Freely transposable and scalable.
- ◆ **SUPERB exposure limit display** with various profiles (ICNIRP, Salzburg precautionary values, ECOLOG, etc. etc.). Freely programmable with a virtually infinite amount of display options.
- ◆ Functionality to update SPECTRAN measurement device firmwares.
- ◆ Filemanager and COMPILER for creation and management of YOUR OWN PROGRAMS for SPECTRAN measurement devices.
- ◆ "Rename" option for renaming any of your SPECTRAN units (for example, including location) for better identification
- ◆ etc. etc. etc.



The PRO PC-Software for the SPECTRAN X

## Included with delivery

- ◆ Desktop-Spectrum-Analyzer in a milled aluminum housing
- ◆ **PC/MAC/LINUX Analyzer Software on CD**
- ◆ OmniLOG 90200 Antenna (only HF V4 X)
- ◆ International Power Supply
- ◆ Aaronia USB-Cable
- ◆ Aluminum Transportcase
- ◆ Cleaning Brush

