



Rev 1.3
26.11.2013

Broadband Preamplifier UBBV Series

External Preamplifier 1Hz - 10GHz, up to 40dB

Highlights

- ◆ Suitable for any brand of Spectrum Analyzers or Antennas
- ◆ Frequency range: 1Hz (DC) - 10GHz
- ◆ Fits perfectly to any SPECTRAN
- ◆ Integrated calibration data, readout via USB
- ◆ Runs with internal battery or power supply
- ◆ Small weight and dimensions
- ◆ **10 years warranty**

References

- ◆ Fraunhofer FHR in Wachtberg, Germany
- ◆ DLR in Cologne, Germany
- ◆ Ruhr University in Bochum, Germany
- ◆ Siemens AG in Berlin, Germany
- ◆ Continental Automotive in Jalisco, Mexico
- ◆ Saab in Linköping, Sweden
- ◆ Cassidian in Elancourt, France
- ◆ Finnish Defence Forces in Espoo, Finland



Made in Germany



Details

Highest Performance in the smallest space

Do you have problems to read weak signals? Or how about boosting that probe gain or maybe pre-amping that antenna. The UBBV is the answer to all these needs as well as many others.

The UBBV is an high-end Preamplifier which works with any brand of Spectrum Analyzers and directly fits to any SPECTRAN.

Since the UBBV has such a high compression point of almost 100 milliwatts, you can even use it to boost the power of small micro transmitters. Newly designed microwave chips enable the UBBV2 to have gain even up to 12GHz.

The UBBV series enables maximum performance, particularly when measuring extremely weak signals e.g. in typical EMC test according to EN55022, EN55011 and so on.



The transport case offers enough space for the preamp & accessories



Frontside



Backside



The UBBV fits directly to any SPECTRAN Spectrum Analyzer

Technical Data

UBBV 1

- ◆ Frequency range: **1MHz - 1GHz**
- ◆ Noise: 3,5dB (typ.)
- ◆ Gain: 40dB (typ.)
- ◆ Max. power at RF input: +15dBm
- ◆ Max. power at RF output: +15dBm
- ◆ Input: 50 Ohm SMA (f)
- ◆ Output: 50 Ohm SMA (m)
- ◆ Interface: USB 2.0/1.1
- ◆ Internal specific calibration data, readout via USB
- ◆ Incl. transport case, power supply incl. international adapters, manual, SMA tool & USB cable
- ◆ Weight: 146gr
- ◆ Dimensions: 81x61x29mm
- ◆ **Warranty: 10 years**

UBBV 2

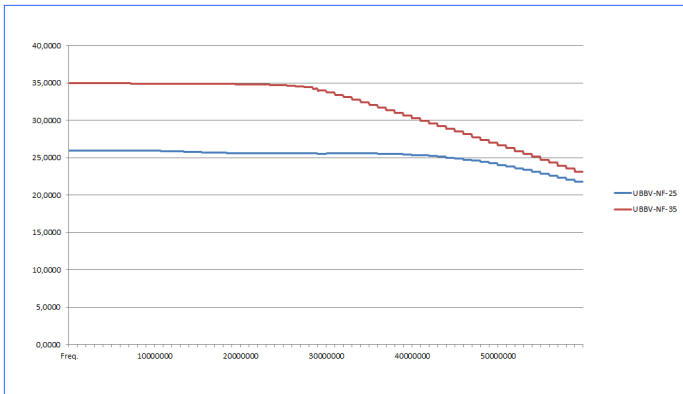
- ◆ Frequency range: **1MHz - 10GHz** (500kHz with -3dB bandwidth)
- ◆ Noise: 3,5dB (typ.)
- ◆ Gain: 40dB (typ.)
- ◆ Max. power at RF input: +15dBm
- ◆ Max. power at RF output: +15dBm
- ◆ Input: 50 Ohm SMA (f)
- ◆ Output: 50 Ohm SMA (m)
- ◆ Interface: USB 2.0/1.1
- ◆ Internal specific calibration data **with up 1000 points**, readout via USB
- ◆ Incl. transport case, power supply incl. international adapters, manual, SMA tool & USB cable
- ◆ Weight: 146gr
- ◆ Dimensions: 81x61x29mm
- ◆ **Warranty: 10 years**

UBBV-NF 25

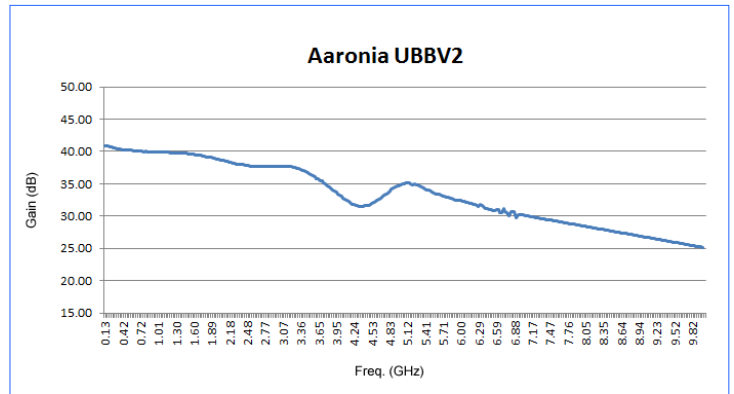
- ◆ Frequency range: **1Hz - 50MHz** (60MHz with -3dB bandwidth)
- ◆ Gain: 25dB (typ.)
- ◆ Max. input DC voltage: 10VDC
- ◆ Max. input AC voltage: 3V or 2.1V rms
- ◆ Max. power at output: +15dBm (50 Ohm)
- ◆ Input: 100 kohm SMA (f)
- ◆ Output: 50 ohm SMA (m)
- ◆ Interface: USB 2.0/1.1
- ◆ Internal specific calibration data, readout via USB
- ◆ Incl. transport case, power supply incl. international adapters, manual, SMA tool & USB cable
- ◆ Weight: 146gr
- ◆ Dimensions: 81x61x29mm
- ◆ **Warranty: 10 years**

UBBV-NF 35

- ◆ Frequency range: **1Hz - 30MHz** (35MHz with -3dB bandwidth)
- ◆ Gain: 35dB (typ.)
- ◆ Max. input DC voltage: 10VDC
- ◆ Max. input AC voltage: 3V or 2.1V rms
- ◆ Max. power at output: +10dBm (50 Ohm)
- ◆ Input: 100 kohm SMA (f)
- ◆ Output: 50 ohm SMA (m)
- ◆ Interface: USB 2.0/1.1
- ◆ Internal specific calibration data, readout via USB
- ◆ Incl. transport case, power supply incl. international adapters, manual, SMA tool & USB cable
- ◆ Weight: 146gr
- ◆ Dimensions: 81x61x29mm
- ◆ **Warranty: 10 years**



Gain UBBV-NF-25 & NF-35



Gain UBBV2

References

User of Aeronia Antennas and Spectrum Analyzers (Examples)

Government, Military, Aeronautic, Astronautic

- ◆ NATO, Belgium
- ◆ Boeing, USA
- ◆ Airbus, Germany
- ◆ Bund (Bundeswehr), Germany
- ◆ Bundeswehr (Technische Aufklärung), Germany
- ◆ Lufthansa, Germany
- ◆ DLR (Deutsches Zentrum für Luft- und Raumfahrt, Germany)
- ◆ Eurocontrol (Flugüberwachung), Belgium
- ◆ Australian Government Department of Defence, Australia
- ◆ EADS (European Aeronautic Defence & Space Company) GmbH, Germany
- ◆ Institut für Luft- und Raumfahrtmedizin, Germany
- ◆ Deutscher Wetterdienst, Germany
- ◆ Polizeipräsidium, Germany
- ◆ Landesamt für Umweltschutz Sachsen-Anhalt, Germany
- ◆ Zentrale Polizeitechnische Dienste, Germany
- ◆ Bundesamt für Verfassungsschutz, Germany
- ◆ BEV (Bundesamt für Eich- und Vermessungswesen)

Research/Development, Science and Universitys

- ◆ Deutsches Forschungszentrum für Künstliche Intelligenz, Germany
- ◆ University Freiburg, Germany
- ◆ Indonesien Institute of Sience, Indonesia
- ◆ Max-Planck-Institut für Polymerforschung, Germany
- ◆ Los Alamos National Labratory, USA
- ◆ University of Bahrain, Bahrain
- ◆ University of Florida, USA
- ◆ University Erlangen, Germany
- ◆ University Hannover, Germany
- ◆ University of Newcastle, United Kingdom
- ◆ University Strasbourg, France
- ◆ Universität Frankfurt, Germany
- ◆ University Munich, Germany
- ◆ Technical University Hamburg, Germany
- ◆ Max-Planck Institut für Radioastronomie, Germany
- ◆ Max-Planck-Institut für Quantenoptik, Germany
- ◆ Max-Planck-Institut für Kernphysik, Germany
- ◆ Max-Planck-Institut für Eisenforschung, Germany
- ◆ Forschungszentrum Karlsruhe, Germany

Industry

- ◆ Shell Oil Company, USA
- ◆ ATI, USA
- ◆ Fedex, USA
- ◆ Walt Disney, California, USA
- ◆ Agilent Technologies Co. Ltd., China
- ◆ Motorola, Brazil
- ◆ IBM, Switzerland
- ◆ Audi AG, Germany
- ◆ BMW, Germany
- ◆ Daimler Chrysler AG, Germany
- ◆ BASF, Germany
- ◆ Deutsche Bahn, Germany
- ◆ Deutsche Telekom, Germany
- ◆ Siemens AG, Germany
- ◆ Rohde & Schwarz, Germany
- ◆ Infineon, Austria
- ◆ Philips Technologie GmbH, Germany
- ◆ ThyssenKrupp, Germany
- ◆ EnBW, Germany
- ◆ RTL Television, Germany
- ◆ Pro Sieben – SAT 1, Germany
- ◆ Channel 6, United Kingdom
- ◆ WDR, Germany
- ◆ NDR, Germany
- ◆ SWR, Germany
- ◆ Bayerischer Rundfunk, Germany
- ◆ Carl-Zeiss-Jena GmbH, Germany
- ◆ Anritsu GmbH, Germany
- ◆ Hewlett Packard, Germany
- ◆ Robert Bosch GmbH, Germany
- ◆ Mercedes Benz, Austria
- ◆ EnBW Kernkraftwerk GmbH, Germany
- ◆ AMD, Germany
- ◆ Infineon Technologies, Germany
- ◆ Intel GmbH, Germany
- ◆ Philips Semiconductors, Germany
- ◆ Hyundai Europe, Germany
- ◆ Saarschmiede GmbH, Germany
- ◆ Wilkinson Sword, Germany
- ◆ IBM Deutschland, Germany
- ◆ Vattenfall, Germany
- ◆ Fraport, Germany

Aaronia Distributors



Aaronia USA, 651 Amberton Crossing
Suwanee, Georgia 30024 USA
Phone ++1 678-714-2000, Fax ++1 678-714-2092
Email: sales@aaroniausa.com
URL: www.aaroniaUSA.com



Aaronia North China, Beijing Mesh Communication
Tech Co. Ltd., No. 2 Huayuan Road, Building 2, Haidian
District, 100191 Beijing, China
Phone ++86 10 822 37 606, Fax ++86 10 822 37 609
Email: sales@bjmesh.com
URL: www.bjmesh.com.cn



Aaronia South China, Shenzhen TORI Wisdom
Technology Co., Ltd, 3BRM, RD FL Luhua Technology
Bldg, Guangxia Road 7, Futian, 518049 Shenzhen, China
Phone ++86 755 888 580 86, Fax +86 755 830 73 418
Email: mail@aaronia-china.com
URL: www.aaronia-china.com



E-Instrument Tech Ltd., No. 16, Lane 37
Guanye E. Riad, Pingchen City,
324587 Taoyuan County, Taiwan
Phone: +886 3 4576 809 Fax: +886 3 468 8611
Email: sales@e-channel.com.tw
URL: www.e-channel.com.tw



Testpribor, Fabriciusa St. 30
Moscow 125363 Russia
Phone ++7 495-225-67-37
Email: testpribor@test-expert.ru
URL: www.test-expert.ru



EgeRate Elektronik Muh. ve Tic. Ltd. Sti.,
Perpa Ticaret Merkezi, A Blok Kat: 5 No: 141,
Sisli / Istanbul, Turkey
Phone ++90 212 220 3483, Fax ++90 212 220 7635
Email: info@egerate.com
URL: www.egerate-store.com



Aimil Ltd, B-906, BSEL Tech Park, Opp. Vashi Rly Strn,
400705 Vashi, Navi Mumbai, India
Phone ++91 22 3918 3554, Fax ++91 22 3918 3562
Email: sanjayagarwal@aimil.com
URL: www.aimil.com



EKKON SA, Paraná 350, Capital Federal,
1017 Buenos Aires, Argentina
Phone ++ 54 114 123 009 1, Fax ++54 114 372 324 4
Email: info@aaronia-argentina.com.ar
URL: www.aaronia-argentina.com.ar



Mono Tech Ltd, 2 Johanan Hasandlar St.
44641 Kfar-Sava, Israel
Phone ++972 72 2500 290, Fax ++972 9 7654 264
Email: kobi@aaronia.co.il
URL: www.aaronia.co.il



Tagor Electronic doo
Tihomira Brankovica 21
18000 Nis, Serbia
Phone ++381 18 575 545, Fax ++381 18 217 125
Email: miodrag.stojilkovic@tagor.rs
URL: www.tagor-instrumenti.rs



NDN, Janowskiego 15
02-784 Warszawa, Poland
Phone ++48 22 641 1547, Fax ++48 22 641 1547
Email: ndn@ndn.com.pl
URL: www.ndn.com.pl



VECTOR Technologies Ltd, 40 Diogenous str., 15234
Halandri, Greece
Phone ++30 210 685 8008, Fax ++30 210 6858 8118
Email: info@vectortechnologies.gr
URL: www.vectortechnologies.gr



Made in Germany

Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany
Phone ++49(0)6556-93033, Fax ++49(0)6556-93034
Email: mail@aaronia.de URL: www.aaronia.com

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