Rev 1.6  
16.03.2017

## EMC Reference Antennas up to 6GHz Series HyperLOG® EMI

EMC Broadbandantennas for the complete frequency range from 20MHz to 6GHz

- ◆ Reference Antenne with 0,3dB accuracy
- ◆ Max. input power: 310W AM
- ◆ Compatible with any Spectrum Analyzer brand
- ◆ Perfect for EMC/EMI pre- and full-compliance tests and immunity measurements
- ◆ Incl. specific calibration details
- ◆ Made in Germany

**AARONIA AG**  
WWW.AARONIA.DE

Made in Germany

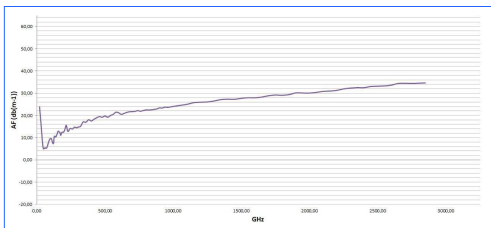


# Technical data

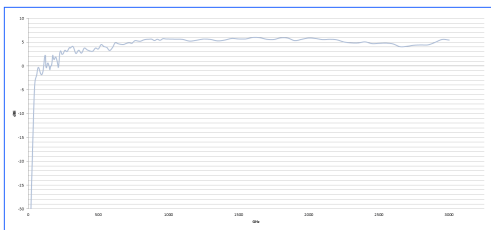
## HyperLOG® 20300 EMI

- ◆ Design: Biconical & LogPer
- ◆ Frequency range: **20MHz-3GHz**
- ◆ Max. input power: 310W AM
- ◆ Immunity test field strength: 10V/m
- ◆ Nominal impedance: 50 Ohm
- ◆ Accuracy: 0,3dB
- ◆ VSWR (typ.): <2:1
- ◆ Gain (typ.): 8dBi
- ◆ Incl. detailed specific calibration data
- ◆ RF-connection: N female
- ◆ Dimensions (L/W/D): (1200x1600x80) mm
- ◆ Weight: 6,5kg
- ◆ Warranty: 10 years

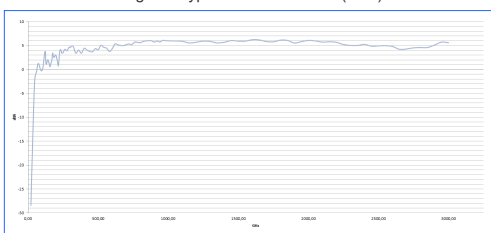
Antenna factor HyperLOG 20300 EMI



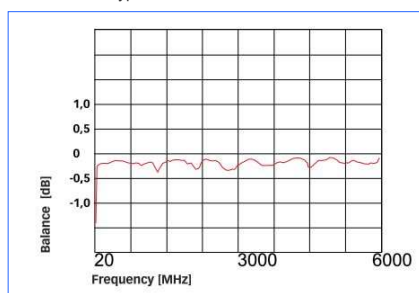
Gain Diagram HyperLOG 20300 EMI (3m)



Gain Diagram HyperLOG 20300 EMI (10m)



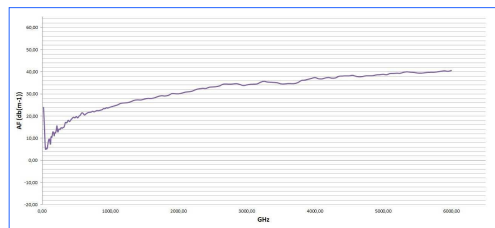
Typical Balance / Unbalance



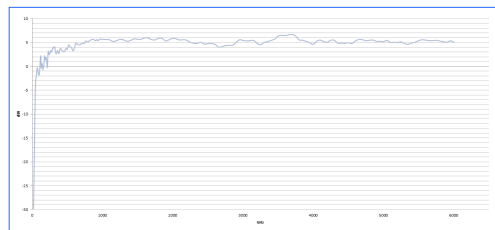
## HyperLOG® 20600 EMI

- ◆ Design: Biconical & LogPer
- ◆ Frequency range: **20MHz-6GHz**
- ◆ Max. input power: 310W AM
- ◆ Immunity test field strength: 10V/m
- ◆ Nominal impedance: 50 Ohm
- ◆ Accuracy: 0,3dB
- ◆ VSWR (typ.): <2:1
- ◆ Gain (typ.): 8dBi
- ◆ Incl. detailed specific calibration data
- ◆ RF-connection: N female
- ◆ Dimensions (L/W/D): (1200x1600x80) mm
- ◆ Weight: 6,5kg
- ◆ Warranty: 10 years

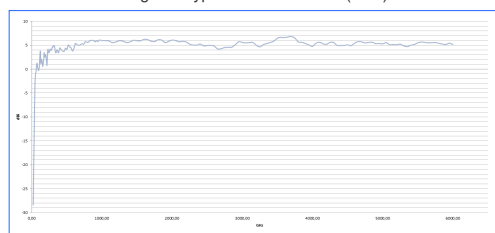
Antenna factor HyperLOG 20600 EMI



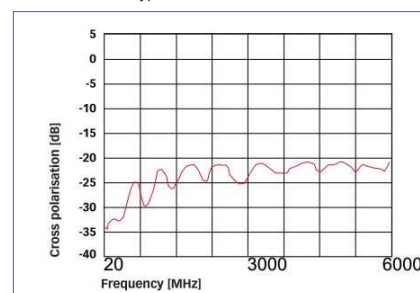
Gain Diagram HyperLOG 20600 EMI (3m)

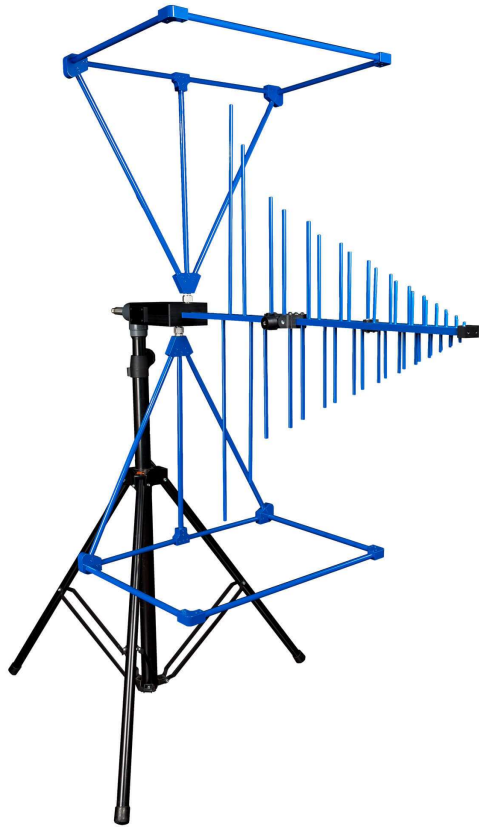


Gain Diagram HyperLOG 20600 EMI (10m)



Typical Cross Polarization





HyperLOG EMI Antenna with optional tripod

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Aaronia's HyperLOG EMI antennas are the ultimate EMC / EMI pre-compliance test antennas with unmatched high accuracy. These antennas offer a very high gain over the full frequency range.

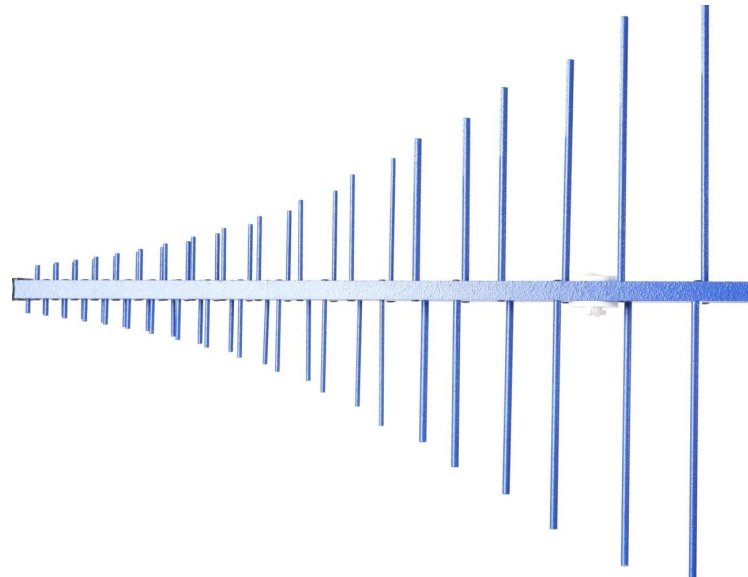
The HyperLOG EMI is Aaronia's latest antenna development and combines the advantages of a biconical antenna and those of a log periodic antenna in a single high end EMC/EMI antenna.

Furthermore the HyperLOG EMI series offer an extremely high accuracy of 0.3dB over the full specified frequency range and therefore can even be used as reference antenna.

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By using the HyperLOG EMI antennas, the common EMI and EMC measurement error-rates, which show up by switching between different test antennas, are avoided. This is because you have only to use one antenna for the complete frequency range instead of two or more antennas. This saves significant costs since the measuring time is reduced drastically.

The HyperLOG EMI series can also be used as a powerful broadcasting antenna with up to 310 watts. This antenna is suitable even for immunity measurements, where very high field strengths are needed by more than 10 V/m.



# Recommended accessories for HyperLOG EMI antennas

## Heavy tripod

Height adjustable, high stability. STRONGLY recommended for use with HyperLOG EMI antennas!

Order/Art.-No.: 283



Tripod for HyperLOG EMI

## 1m / 5m / 10m SMA-Cable

High quality special SMA cable for connecting any HyperLOG EMI Antenna with various test equipment like our RF Spectrum-Analyzer. You can choose between 3 different cables:

- 1m standard SMA cable (RG316U)
- 5m LowLoss SMA cable (especially low damping)
- 10m LowLoss SMA cable (especially low damping)

All versions: SMA plug (male) / SMA plug (male)

Order/Art.-No.: 771 (1m Cable), 772 (5m Cable), 773 (10m Cable)



SMA Cable (1-10m)

## SMA to N Adapter

This special adapter allows operation of all HyperLOG EMI Antennas with any spectrum-analyzer with SMA connector (like the Aaronia SPECTRAN series).

Especially massive, chrome-plated design. This adapter is usable for very high frequencies up to at least 18GHz. Physical dimensions are just 30x20mm. Nominal impedance 50 Ohms. Layout: SMA socket (female) / N plug (male).

Order/Art.-No.: 770



SMA to N Adapter

## Laser

Perfect for pinpointing any RF source even at bright daylight. Including connector and all needed screws. Easy to connect on top of any HyperLOG EMI antenna.

Order/Art.-No.: 791 (150mW Laser), 792 (1mW Laser)



150mW Laser

# References

## Cross-Section of Aaronia Clients

### Government, Military, Aeronautic, Astronautic

- ♦ NATO, Belgium
- ♦ Department of Defense, USA
- ♦ Department of Defense, Australia
- ♦ Airbus, Germany
- ♦ Boeing, USA
- ♦ Bundeswehr, Germany
- ♦ NASA, USA
- ♦ Lockheed Martin, USA
- ♦ Lufthansa, Germany
- ♦ DLR, Germany
- ♦ Eurocontrol, Belgium
- ♦ EADS, Germany
- ♦ DEA, USA
- ♦ FBI, USA
- ♦ BKA, Germany
- ♦ Federal Police, Germany
- ♦ Ministry of Defense, Netherlands

### Research/Development, Science and Universities

- ♦ MIT - Physics Department, USA
- ♦ California State University, USA
- ♦ Indonesien Institute of Science, Indonesia
- ♦ Los Alamos National Laboratory, USA
- ♦ University of Bahrain, Bahrain
- ♦ University of Florida, USA
- ♦ University of Victoria, Canada
- ♦ University of Newcastle, United Kingdom
- ♦ University of Durham, United Kingdom
- ♦ University Strasbourg, France
- ♦ University of Sydney, Australia
- ♦ University of Athen, Greece
- ♦ University of Munich, Germany
- ♦ Technical University of Hamburg, Germany
- ♦ Max-Planck Institute for Radio Astronomy, Germany
- ♦ Max-Planck-Institute for Nuclear Physics, Germany
- ♦ Research Centre Karlsruhe, Germany

### Industry

- ♦ APPLE, USA
- ♦ IBM, Switzerland
- ♦ Intel, Germany
- ♦ Shell Oil Company, USA
- ♦ ATI, USA
- ♦ Microsoft, USA
- ♦ Motorola, Brazil
- ♦ Audi, Germany
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- ♦ Osram, Germany
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- ♦ IBM Deutschland, Germany
- ♦ Nokia-Siemens Networks, Germany



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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