



Rev 1.0  
26.08.2015

# Ultra-Wideband LogPer Antenna up to 35GHz HyperLOG® 60250 & 60350

One LogPer Antenna for the complete frequency range from 680MHz to 35GHz

## Highlights

- ◆ Optimal for usage with spectrum analysers or TSCM Receiver
- ◆ Top-quality high-tech TEFLON antenna support
- ◆ Excellent forward/backward ratio
- ◆ Freely alignable polarisation
- ◆ Excellent symmetry of radiation patterns
- ◆ Integrated 1/4" tripod socket
- ◆ Suitable for mobile use
- ◆ Made in Germany

## Calibration & standards

- ◆ The log-periodic precompliance test antenna of the HyperLOG® 60xxx series are suitable for interference field strength measurement. The specialized broadband characteristics allow measurements to be taken in the complete specified frequency range **without switching**.
- ◆ **These antennas are suitable for measurement according to the following standards and procedures:**  
CISPR, VDE, MIL, VG, EN 55011, EN 55013, EN 55015, EN 55022, MIL-Std-461.

## Included with delivery

- ◆ HyperLOG® 60xxx-Antenna
- ◆ Typical calibration data with up to 687 calibration points (50MHz steps)
- ◆ Aluminum design carrycase with custom padding
- ◆ Sturdy, detachable pistol grip with "miniature tripod" mode
- ◆ Special Aaronia SMA toolset with over-torque protection



Made in Germany

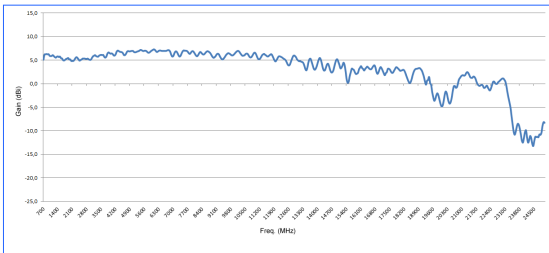


# Technical Data

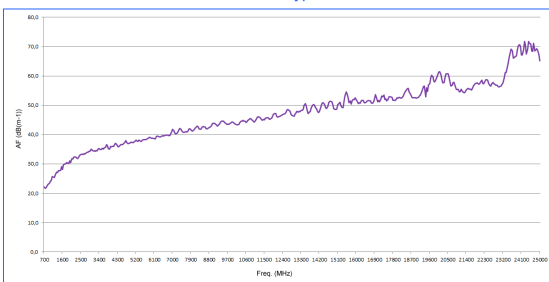
## HyperLOG® 60250

- ◆ Design: Logarithmic-periodic
- ◆ Frequency range: **680MHz-25GHz**
- ◆ Max. transmission power: 50 W CW (800MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ VSWR (typ.): <1:2,5
- ◆ Gain (typ.): 5dBi
- ◆ Calibration points: 487 (50MHz steps)
- ◆ RF connection: SMA (female) or N via Adapter
- ◆ Dimensions (L/W/D): (340x200x25) mm
- ◆ Weight: 250gr

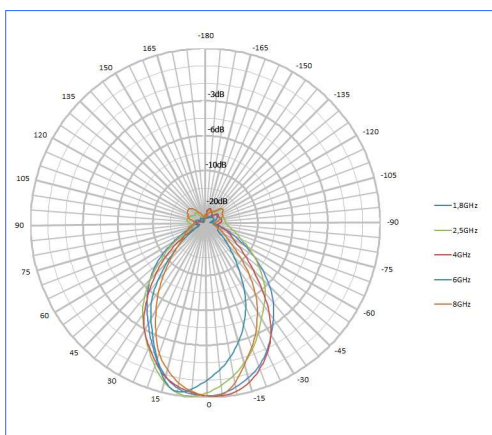
Gain Diagram HyperLOG 60250



Antenna Factor HyperLOG 60250



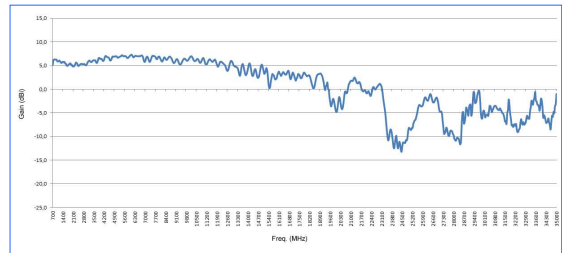
Horizontal Pattern HyperLOG 60xx Serie



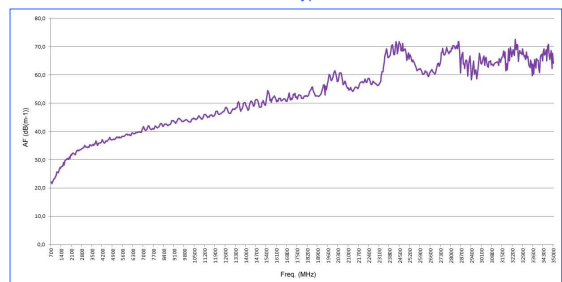
## HyperLOG® 60350

- ◆ Design: Logarithmic-periodic
- ◆ Frequency range: **680MHz-35GHz**
- ◆ Max. transmission power: 50 W CW (800MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ VSWR (typ.): <1:2,5
- ◆ Gain (typ.): 5dBi
- ◆ Calibration points: 687 (50MHz steps)
- ◆ RF connection: SMA (female) or N via Adapter
- ◆ Dimensions (L/W/D): (340x200x25) mm
- ◆ Weight: 250gr

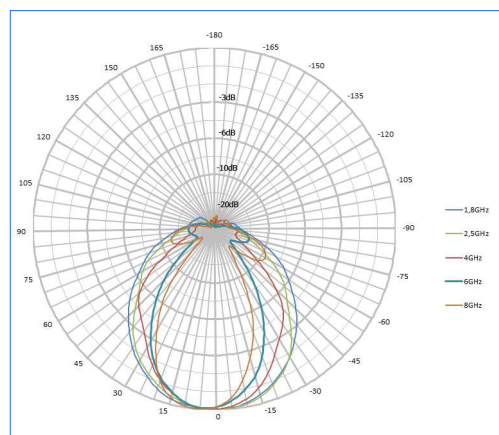
Gain Diagram HyperLOG 60350



Antenna Factor HyperLOG 60350



Vertical Pattern HyperLOG 60xx Serie



# Description



HyperLOG 60xxx Antenna with pistol grip expanded as a miniature tripod

The HyperLOG® 60xxx logger antennas come standard with a specially constructed, high tech radom housing. This housing has been constructed after intense research with the most modern computer technology in such a way that its shape, material and special coating have virtually no influence on measurements, not even in case of dew or other kinds of humidity collecting on the surface. Another important factor for Aaronia was the development of a radom with the lowest possible damping factor achievable. This turned out to be quite an adventure for our development team, particularly in the high GHz ranges. Fortunately, this adventure has been mastered resulting in a beautiful, elegant design, to the complete satisfaction of the development team. Our first test measurements even by far surpassed our guidelines!

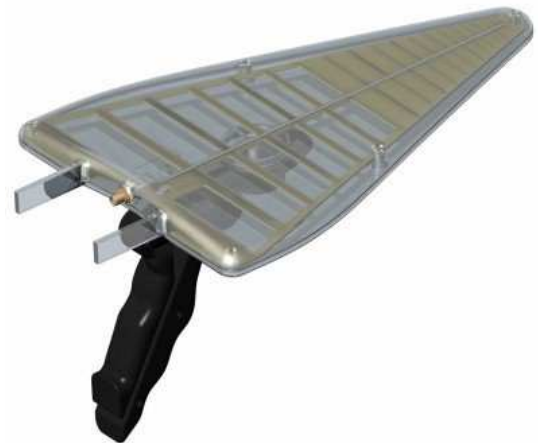
The resulting antenna had the best possible protection against mechanical stress and environmental influence without sacrificing any of its performance.



Lot of space for optionally accessories:  
The HyperLOG® transportcase

With their log-periodic measurement antennas from the HyperLOG® 60xxx series, Aaronia finally offers a very cost-effective alternative, which at the same time meets the highest expectations. In conjunction with the HyperLOG® antennas, every regular spectrum analyser becomes a fully professional directional RF measurement device within a few moments. Thus, a perfect "dream team" for EMC measurement in the laboratory or for outdoor use is at your disposal.

Due to their small weight and the multi-functional handle, these antennas are the optimal supplement for portable EMC measurement devices for locating and evaluating any kind of signal source.



Also available in a "transparent" finish at extra charge

Included with delivery: A sturdy aluminum design carrycase with custom padding for the antenna, cables and accessories. Furthermore, every antenna of the HyperLOG® 60xxx series includes a detachable multi-functional pistol grip with "miniature-tripod" mode and an appropriate SMA toolset.

# Accessories

## Aluminum tripod

Height adjustable, high stability. Recommended for use with HyperLOG 70xx and 60xxx antennas. Max. height: 105cm.

Order/Art.-No.: 281



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

High quality special SMA cable for connecting any HyperLOG®-Antenna or BicoLOG®-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.: 771X (1m Cable), 772X (5m Cable), 773X (10m Cable)



## SMA to N Adapter

This special high quality adapter allows operation of all HyperLOG®-Antenna with any standard spectrum-analyzer with N connector. Also this adapter is needed to connect BicoLOG® antennas to a SPECTRAN® Spectrum Analyzer.

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



## Heavy multifunctional Pistol Grip (strongly recommended!)

Highly recommend for the usage of HyperLOG antennas. Quick and easy change of antenna polarization, perfect antenna handling.

Order/Art.-No.: 282



# References

## Cross-Section of Aeronia 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 of Strasbourg, France
- ◆ University of Sydney, Australia
- ◆ University of Athens, Greece
- ◆ University of Munich, Germany
- ◆ Technical University of Hamburg, Germany
- ◆ Max-Planck Institute for Radio Astronomy, Germany
- ◆ Max-Planck Institute for Quantum Optics, Germany
- ◆ Max-Planck-Institute for Nuclear Physics, Germany
- ◆ Max-Planck-Institute for Iron Research, Germany
- ◆ Research Centre Karlsruhe, Germany

### Industry

- ◆ APPLE, USA
- ◆ IBM, Switzerland
- ◆ Intel, Germany
- ◆ Shell Oil Company, USA
- ◆ ATI, USA
- ◆ Microsoft, USA
- ◆ Motorola, Brazil
- ◆ Audi, Germany
- ◆ BMW, Germany
- ◆ Daimler, Germany
- ◆ Volkswagen, Germany
- ◆ BASF, Germany
- ◆ Siemens AG, Germany
- ◆ Rohde & Schwarz, Germany
- ◆ Infineon, Austria
- ◆ Philips, Germany
- ◆ ThyssenKrupp, Germany
- ◆ EnBW, Germany
- ◆ RTL Television, Germany
- ◆ Pro Sieben – SAT 1, Germany
- ◆ Channel 6, United Kingdom
- ◆ CNN, USA
- ◆ Duracell, USA
- ◆ German Telekom, Germany
- ◆ Bank of Canada, Canada
- ◆ NBC News, USA
- ◆ Sony, Germany
- ◆ Anritsu, Germany
- ◆ Hewlett Packard, Germany
- ◆ Robert Bosch, Germany
- ◆ Mercedes Benz, Austria
- ◆ Osram, Germany
- ◆ DEKRA, Germany
- ◆ AMD, Germany
- ◆ Keysight, China
- ◆ Infineon Technologies, Germany
- ◆ Philips Semiconductors, Germany
- ◆ Hyundai Europe, Germany
- ◆ JDSU, Korea
- ◆ Wilkinson Sword, Germany
- ◆ IBM Deutschland, Germany
- ◆ Nokia-Siemens Networks, Germany