

## Product Datasheet - Technical Specifications



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ACTIVE BROADBAND ANTENNAS

# HYPERLOG<sup>®</sup>

40 X SERIES

Active antenna for the entire frequency range from 400 MHz to 6 GHz



## Highlights:

- Compatible with any spectrum analyzer or oscilloscope
- Ultra-high gain (45 dBi)
- Battery- or power supply-operated
- Suitable for open-field or lab application

**AARONIA AG**  
WWW.AARONIA.DE



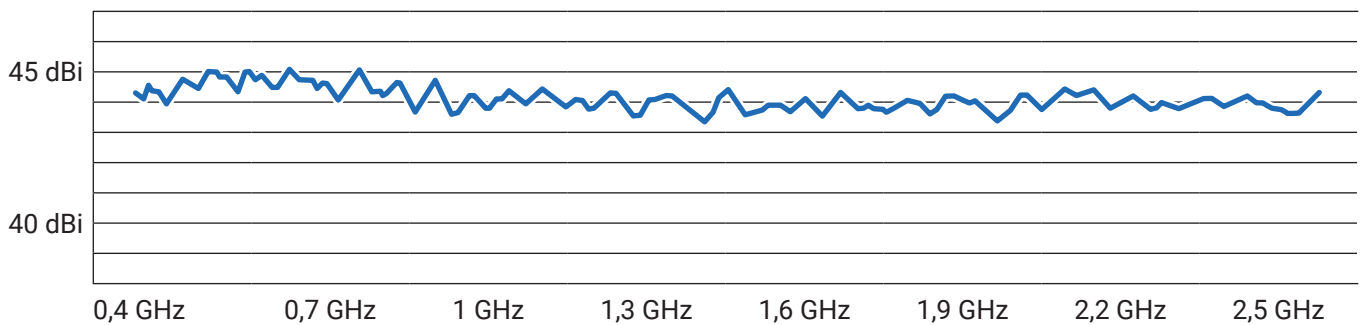
MADE IN GERMANY

# Specifications

## HyperLOG® 4025 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	211 (10 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 2
Gain (typ.)	44 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	400 MHz – 2,5 GHz (down to 70 MHz with limited directivity)	Interface	USB 2.0 / 1.1 (calibration data readout)
Pre-Amp Noise „linear“ increase	100 MHz: 3,50 dB; 2,50 GHz: 3,91 dB	Pre-Amp Gain (typ.) „linear“ falloff	1 MHz: 40,0 dB; 2,5 GHz: 38,0 dB

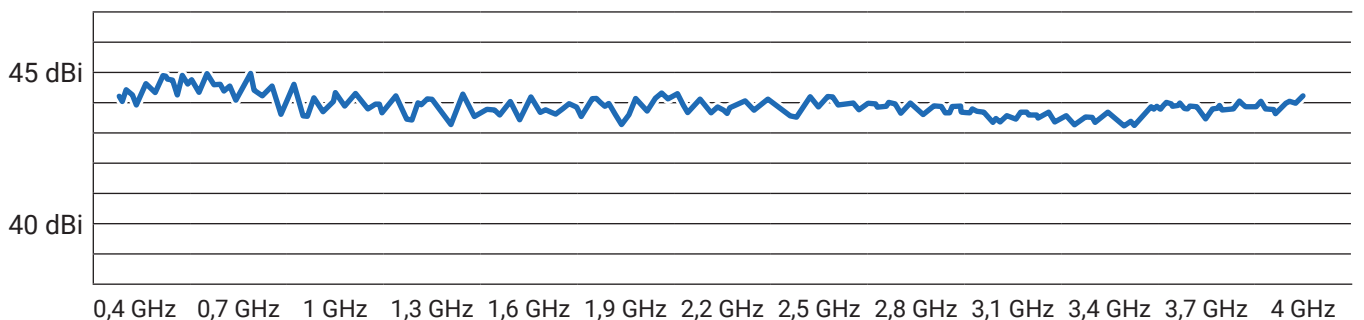
Gain Diagram HyperLOG® 4025 X



## HyperLOG® 4040 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	361 (10 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 2
Gain (typ.)	44 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	400 MHz – 4 GHz (down to 70 MHz with limited directivity)	Interface	USB 2.0 / 1.1 (calibration data readout)
Pre-Amp Noise „linear“ increase	100 MHz: 3,50 dB; 4 GHz: 4,15 dB	Pre-Amp Gain (typ.) „linear“ falloff	1 MHz: 40,0 dB; 4 GHz: 36,5 dB

Gain Diagram HyperLOG® 4040 X

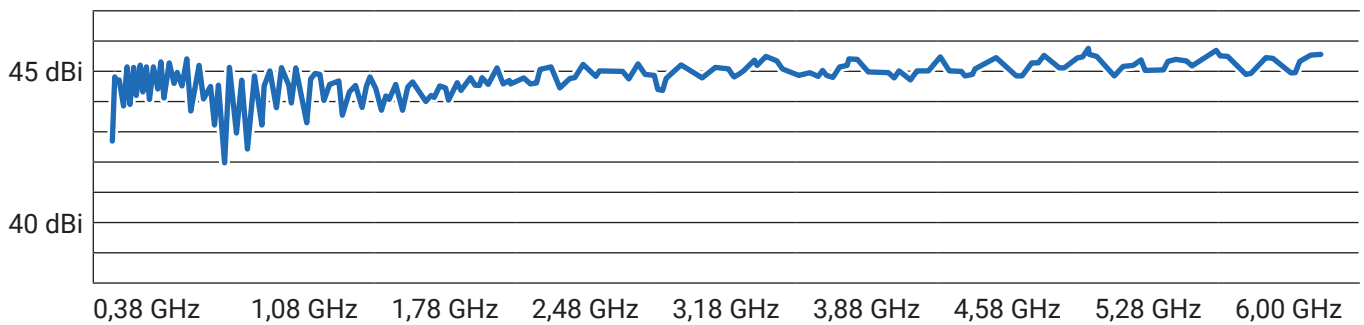


# Specifications

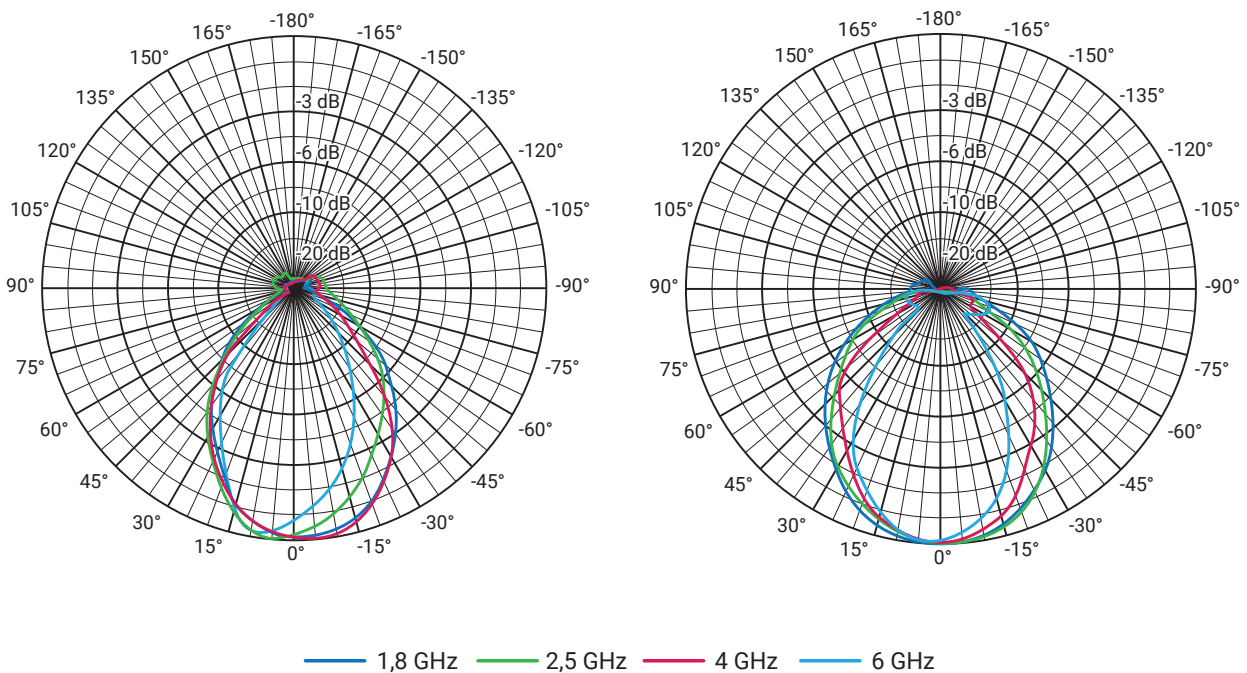
## HyperLOG® 4060 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	561 (10 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 2
Gain (typ.)	45 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	400 MHz – 6 GHz (down to 70 MHz with limited directivity)	Interface	USB 2.0 / 1.1 (calibration data readout)
Pre-Amp Noise „linear” increase	100 MHz: 3,5 dB; 3 GHz: 4,0 dB, 6 GHz: 4,5 dB	Pre-Amp Gain (typ.) „linear” falloff	1 MHz: 40,0 dB; 3 GHz: 37,5 dB; 6 GHz: 35,0 dB

Gain Diagram HyperLOG® 4060 X



Horizontal und Vertical Pattern HyperLOG® 40 X Series



# Recommended Accessories



## Multifunctional Pistol Grip

(strongly recommended)

Highly recommended for our HyperLOG® active antennas. Quick and easy antenna polarization change, guarantees perfectly stable antenna handling.

**Order/Art.-No.: 503/012**

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

High-quality special SMA cable, connecting test equipment to any HyperLOG® antenna. Customers can choose between three different cables:

- 1 m standard SMA cable (RG316U)
  - 5 m low-loss SMA cable (especially low damping)
  - 10 m low-loss SMA cable (especially low damping)
- All versions: SMA plug (male) / SMA plug (male)

**Order/Art.-No.: 501/006 (1 m), 501/008 (5 m), 501/0010 (10 m)**



## SMA to N Adapter

This special high-quality adapter allows for operating all HyperLOG® antennas with any standard spectrum analyzer equipped with an N connector. This adapter can be used with very high frequencies. Measuring just 30 x 20 mm in size, its nominal impedance is 50 Ohm. Layout: SMA socket (female) / N plug (male).

**Order/Art.-No.: 502/009**



# Recommended Accessories



## Miniature Pistol-Grip Tripod

Detachable handle with super-practical miniature tripod mode. The handle can be attached to the back of the unit, and allows for optimal handling and a fixed stand. Strongly recommended for PC use.

**Order/Art.-No.: 503/012**

## Laser Pointer

Laser pointer for pinpointing any RF source, even in bright daylight. Available as 150 mW power version (green laser). Easy to install on top of any HyperLOG® X antenna. Connector and screws included.

**Order/Art.-No.: 503/039**



## Compass

Small ball compass for our HyperLOG® X antennas. Works at any antenna position due to its liquid-filled ball.

Can be used separately or in combination with our laser pointer. Connector and screws included.

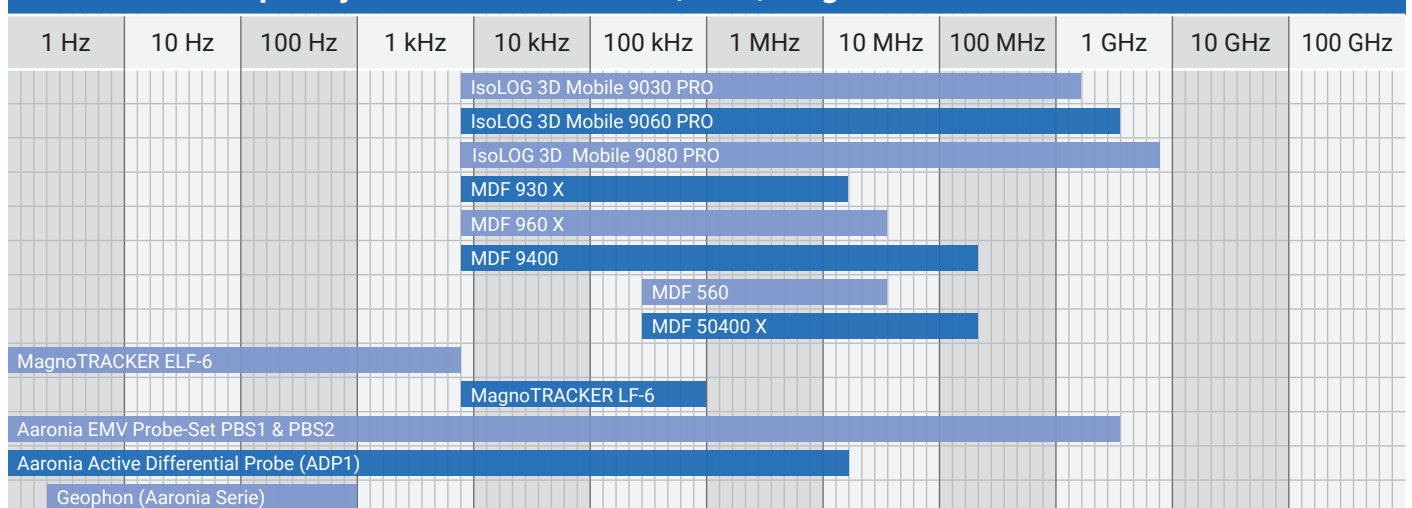
**Order/Art.-No.: 503/001**

# Frequency Overviews

## Frequency Overview HyperLOG®, BicoLOG® and PowerLOG® Antennas



## Frequency Overview IsoLOG® 3D, MDF, MagnoTRACKER® and Probes



# REFERENCES



## Selected Aaronia Clients

### Government, Military, Aeronautic, Astronautic

- **NATO**, Belgium
- **Department of Defense (DoD)**, USA
- **Department of Defence**, Australia
- **Airbus**, Germany
- **Boeing**, USA
- **German Armed Forces**, Germany
- **NASA**, USA
- **Lockheed Martin**, USA
- **Lufthansa**, Germany
- **German Aerospace Center (DLR)**, Germany
- **Eurocontrol**, Belgium
- **EADS**, Germany
- **Drug Enforcement Administration (DEA)**, USA
- **Federal Bureau of Investigation (FBI)**, USA
- **Federal Criminal Police Office (BKA)**, Germany
- **Federal Police**, Germany
- **Ministry of Defence**, Netherlands

### Research/Development, Science and Universities

- **MIT - Physics Department**, USA
- **California State University**, USA
- **Indonesian Institute of Science (LIPI)**, Indonesia
- **Los Alamos National Laboratory (LANL)**, USA
- **University of Bahrain**, Bahrain
- **University of Florida**, USA
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- **Max-Planck Inst. for Radio Astronomy**, Germany
- **Max-Planck Inst. for Nuclear Physics**, Germany
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### Industry

- **IBM**, Switzerland
- **Intel**, Germany
- **Shell Oil Company**, USA
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- **Daimler**, Germany
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