

# ACTIVE BROADBAND ANTENNAS

# **HYPERLOG<sup>®</sup>**

## 30 X SERIES

Active antenna for RF-pinpointing | Frequency range 380 MHz to 20 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

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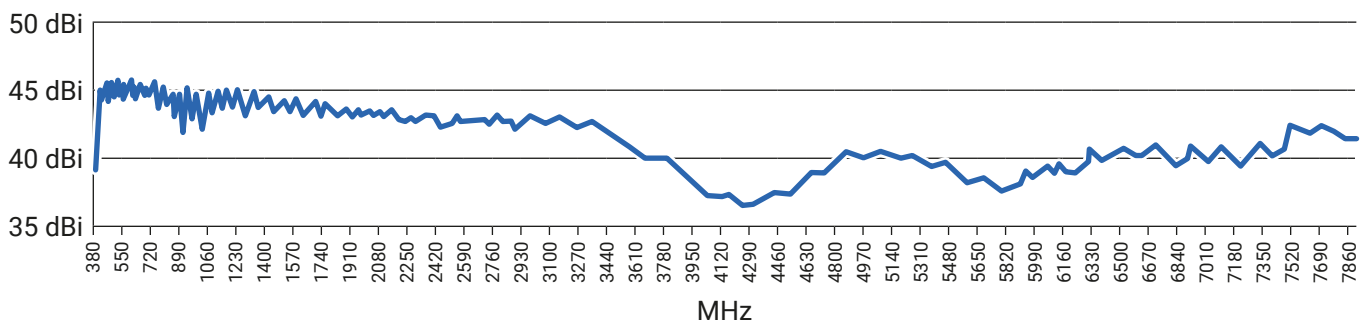
**MADE IN GERMANY**

# Specifications

## HyperLOG® 3080 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	763 (10 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 1:2
Gain (typ.)	45 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	380 MHz – 8 GHz (down to 50 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 dB; 6 GHz: 4,5 dB	Pre-Amp Gain (typ.) „linear“ falloff	1 MHz: 40 dB; 3 GHz: 37,5 dB; 6 GHz: 35 dB

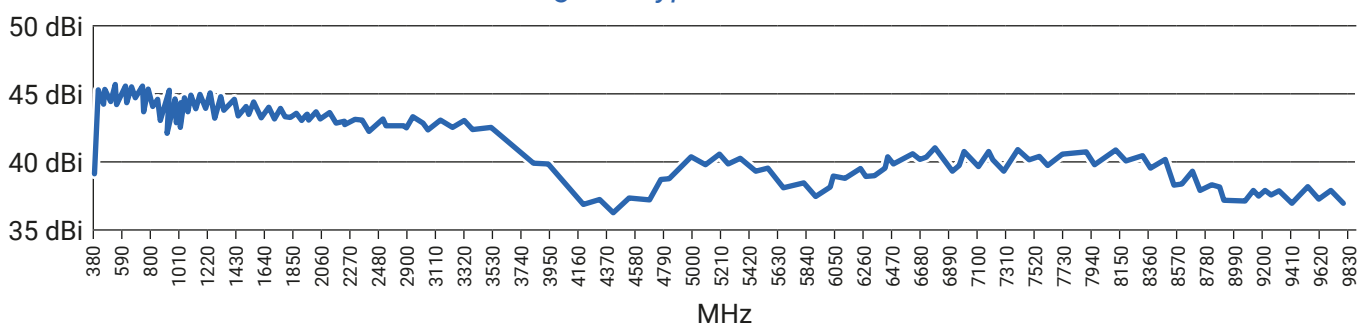
Gain Diagram HyperLOG® 3080 X



## HyperLOG® 30100 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	963 (10 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 1:2,5
Gain (typ.)	44 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	380 MHz – 10 GHz (down to 50 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 dB; 6 GHz: 4,5 dB	Pre-Amp Gain (typ.) „linear“ falloff	1 MHz: 40 dB; 3 GHz: 37,5 dB; 6 GHz: 35 dB

Gain Diagram HyperLOG® 30100 X

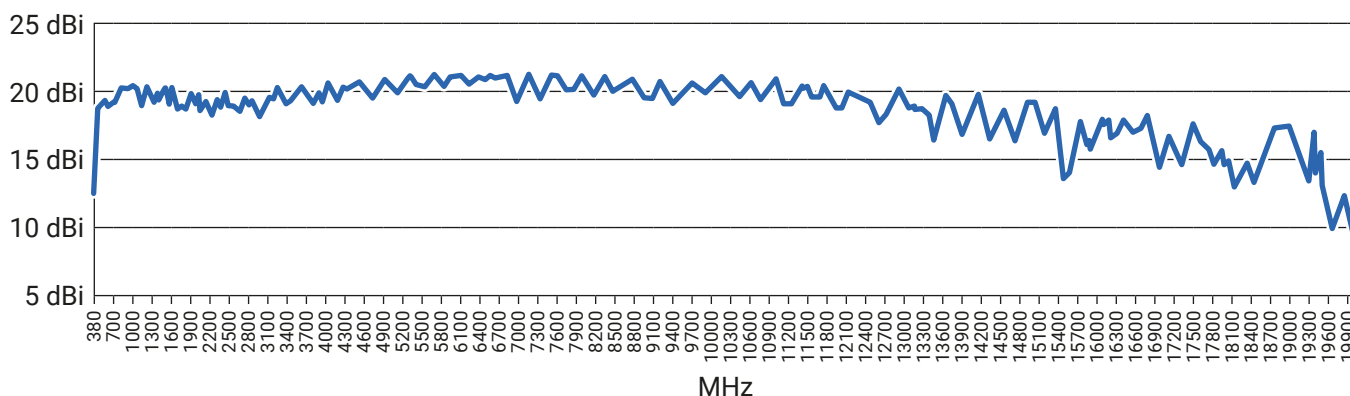


# Specifications

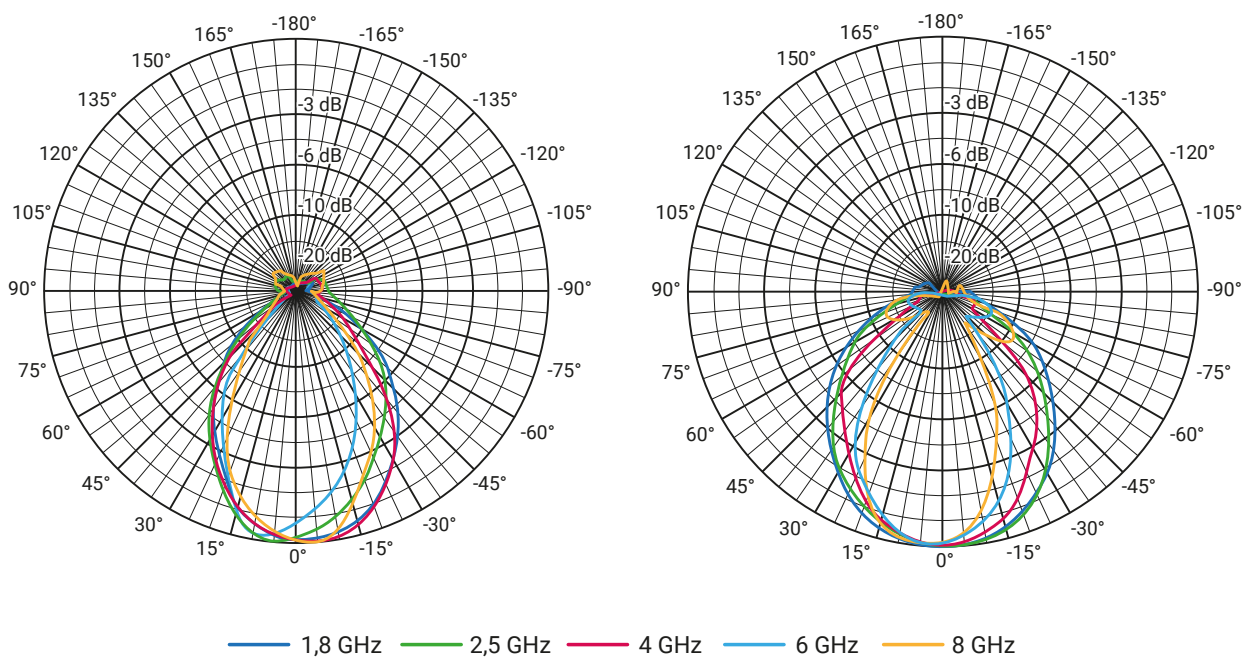
## HyperLOG® 30200 X

Dimensions [L x W x D]	640 x 360 x 30 mm	Nominal Impedance	50 Ohm
Weight	1400 g	Calibration Points	394 (50 MHz steps)
Design	Active log-periodic	VSWR (typ.)	< 1:2,5
Gain (typ.)	19 dBi	Tripod Socket	1/4"
RF Connection	SMA (f) or N with adapter (see optional adapter)	Warranty	2 years
Frequency Range	380 MHz – 20 GHz (down to 50 MHz with limited directivity)	Interface	USB 2.0 / 1.1
Pre-Amp Noise	2,5 dB	Pre-Amp Gain (typ.)	14 dB

Gain Diagram HyperLOG® 30200 X



Horizontal und Vertical Pattern HyperLOG® 30 X Series



# Recommended Accessories

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## Multifunctional Pistol Grip

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(strongly recommended)

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

**Order/Art.-No.: 282**

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

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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.: 771 (1 m), 772 (5 m), 773 (10 m)**



## SMA to N Adapter

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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.: 770**



# 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.: 280**

## 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.: 791 (150 mW)**



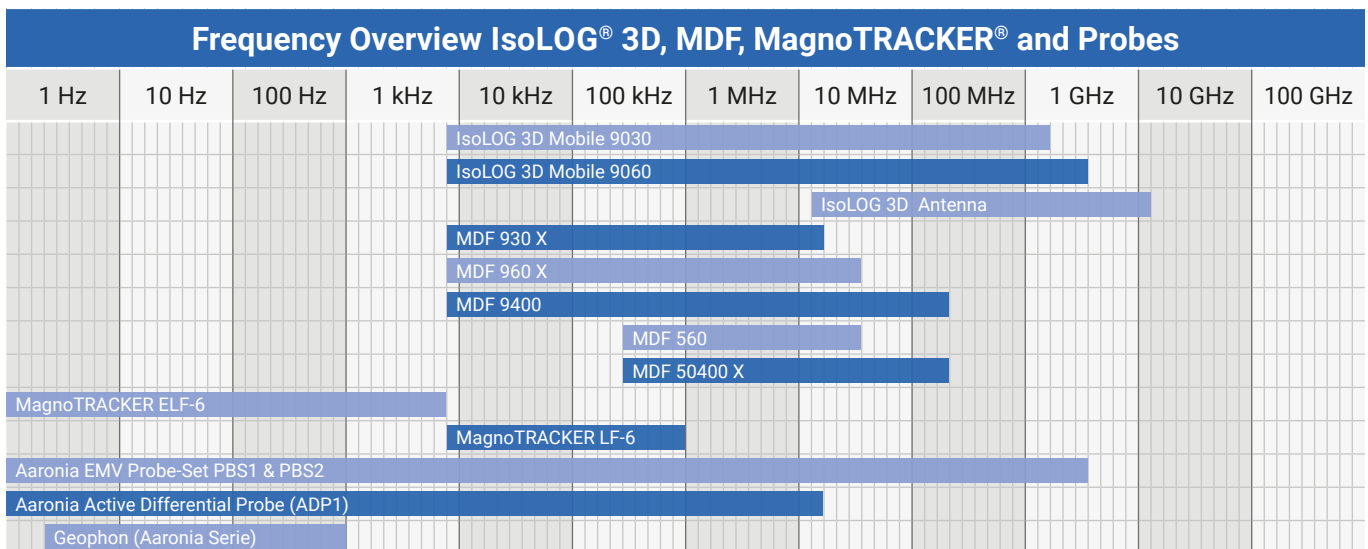
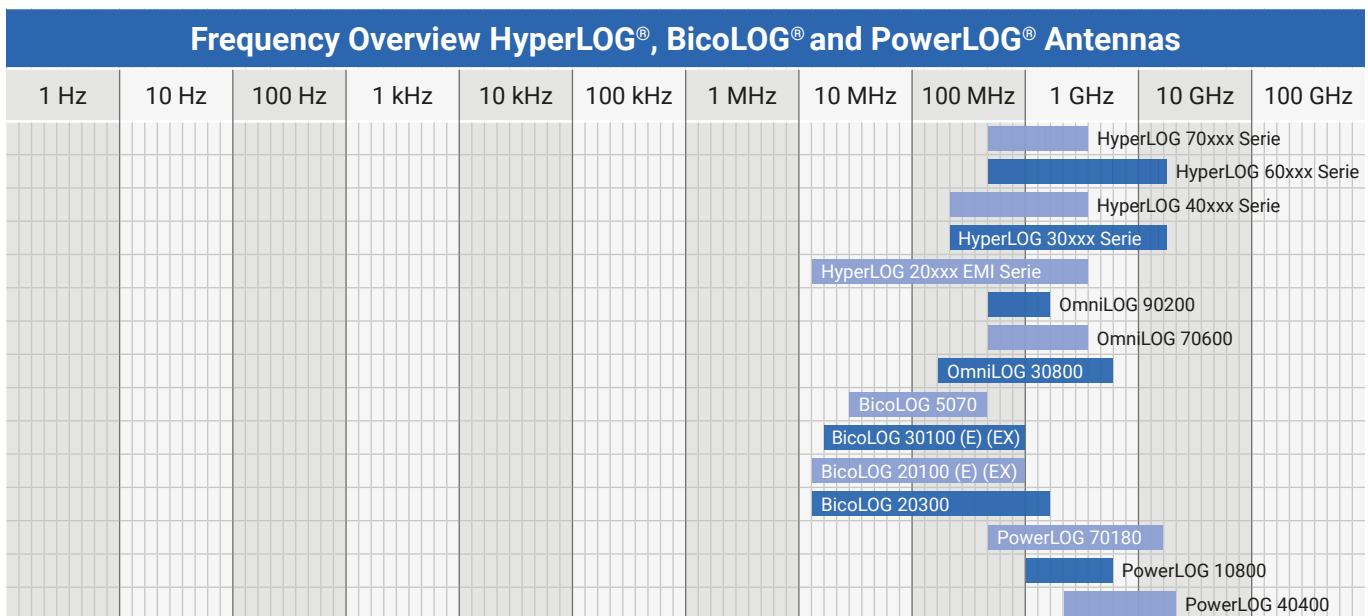
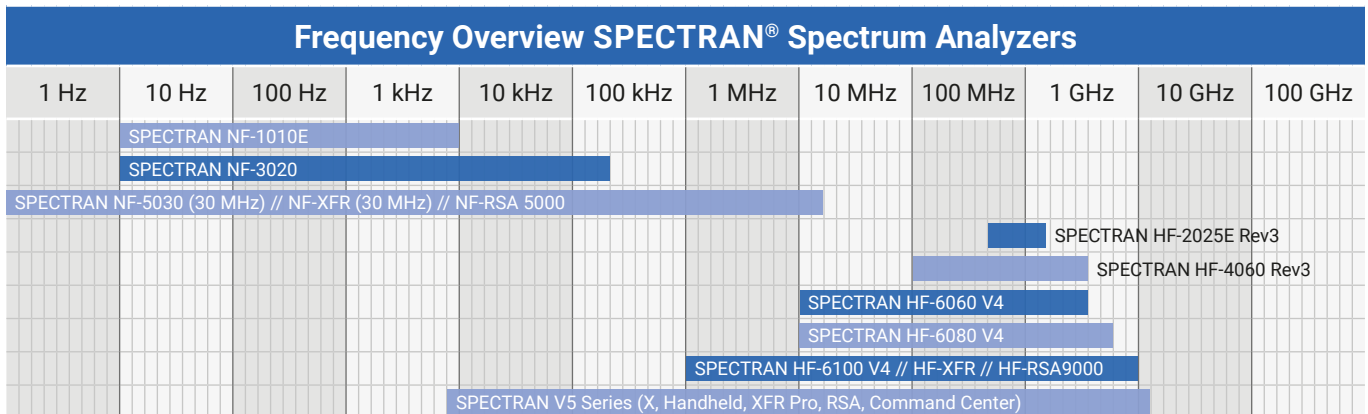
## Compass

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.: 795**

# Frequency Overviews





# REFERENCES



## Selected List of Aaronia Clients

### Government, Military, Aero- and 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
- **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 Inst. for Radio Astronomy**, Germany
- **Max-Planck Inst. for Nuclear Physics**, Germany
- **Research Centre Karlsruhe**, Germany

### Industry

- **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 (Energie Baden-Württemberg)**, Germany
- **CNN**, USA
- **Duracell**, USA
- **German Telekom**, Germany
- **Bank of Canada**, Canada
- **NBC News**, USA
- **Sony**, Germany
- **Anritsu**, Germany
- **Hewlett-Packard**, Germany
- **Bosch**, Germany
- **Mercedes-Benz**, Austria
- **Osram**, Germany
- **DEKRA**, Germany
- **AMD**, Germany
- **Keysight**, China
- **Infineon Technologies**, Germany
- **Philips Semiconductors**, Germany
- **Hyundai Europe**, Germany
- **VIAVI**, Korea
- **Wilkinson Sword**, Germany
- **IBM Deutschland**, Germany
- **Nokia-Siemens Networks**, Germany



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