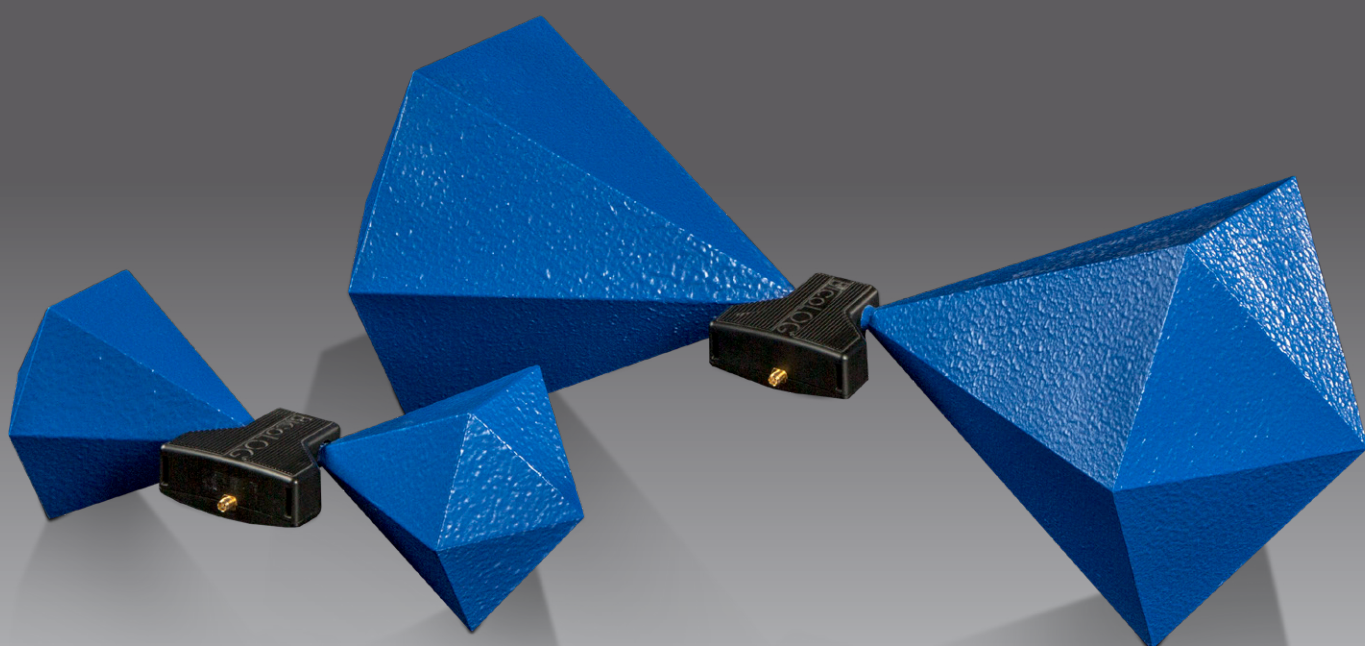


BICONICAL ANTENNAS

BICOLOG[®]

SERIES

Broadband transmission and reception from 20 MHz to 3 GHz – mobile and stationary use



Highlights:

- One broadband antenna for the entire frequency range (20 MHz – 3 GHz)
- Ideal in combination with spectrum analyzers
- Lightweight and small in size

**AARONIA AG**
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Tel.: +49(0)6556-9019-355 Fax: +49(0)6556-93034
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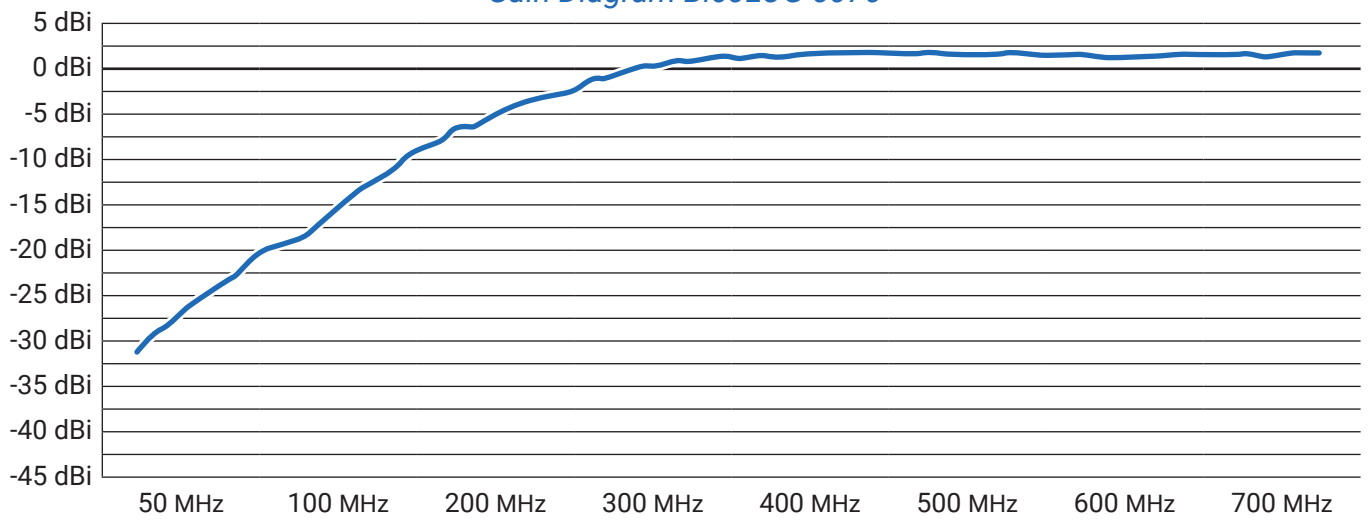
MADE IN GERMANY

Specifications

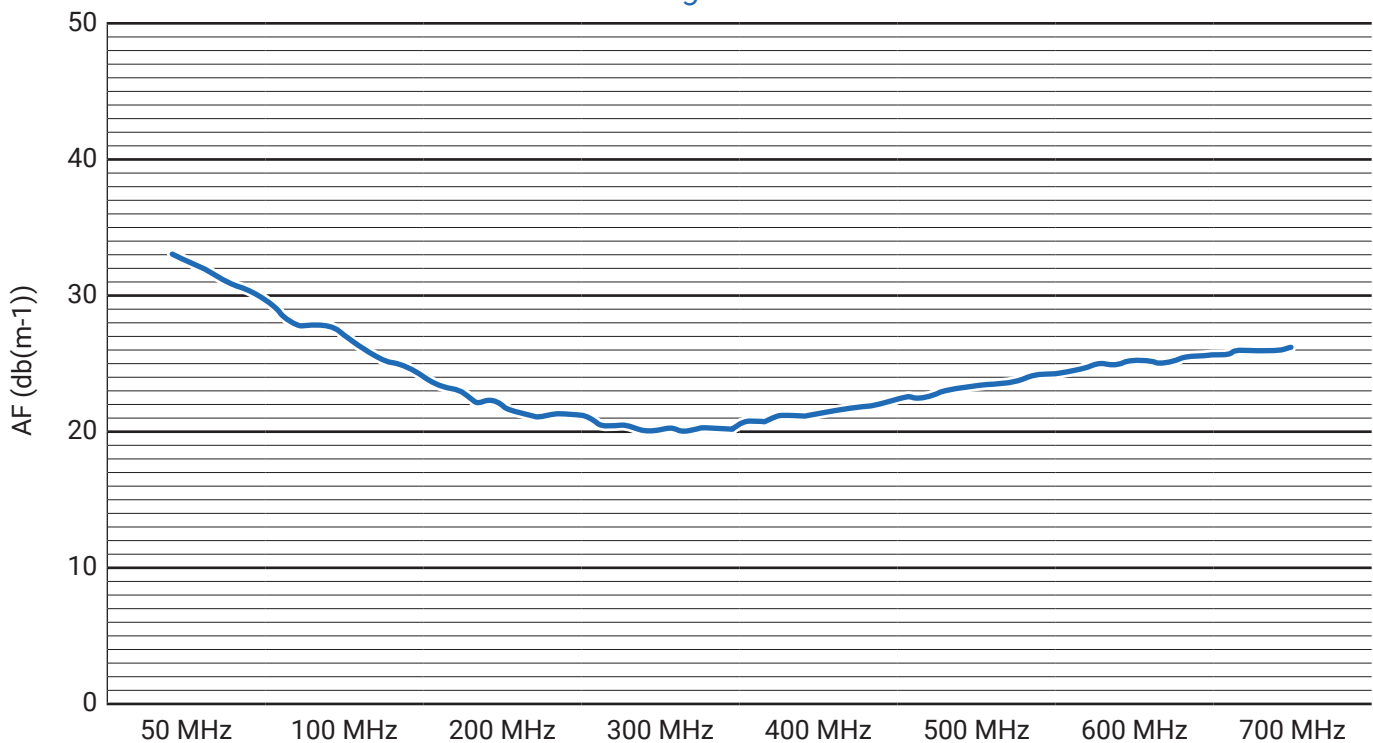
BicoLOG® 5070

| | | | |
|-------------------------|--------------------|--------------------|-----------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance | 50 Ohm |
| Weight | 350 g | Calibration Points | 70 (5 MHz and 10 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 50 MHz – 700 MHz | Tripod Socket | 1/4" |
| Gain | -29 dBi – 1 dBi | Antenna Factor | 20 – 33 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 5070



Antenna Factor Diagram BicoLOG 5070

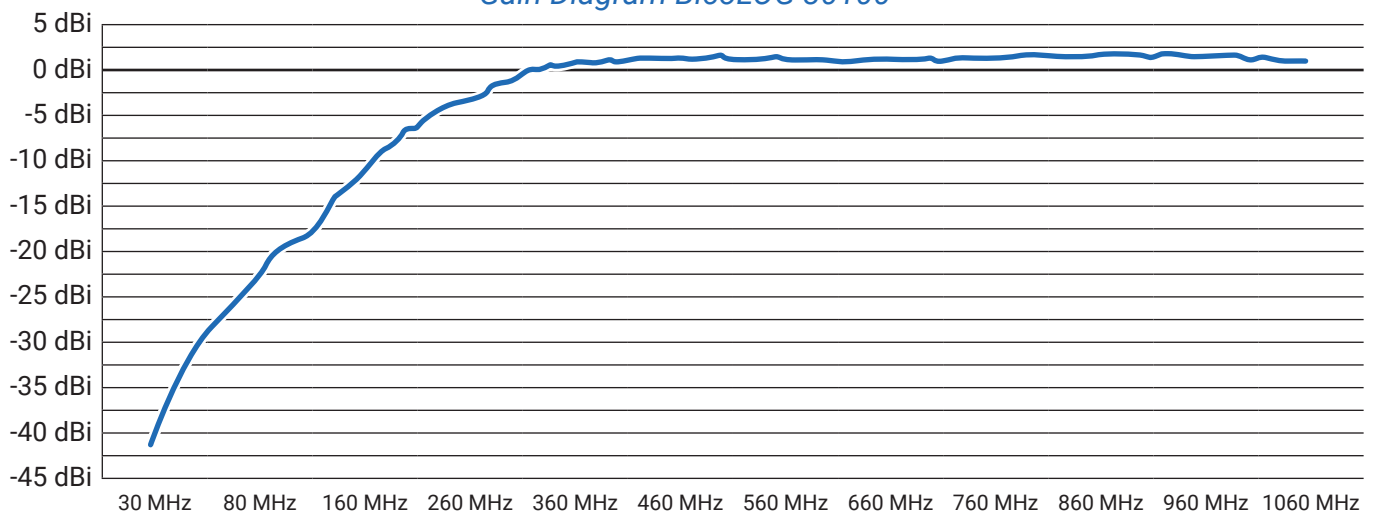


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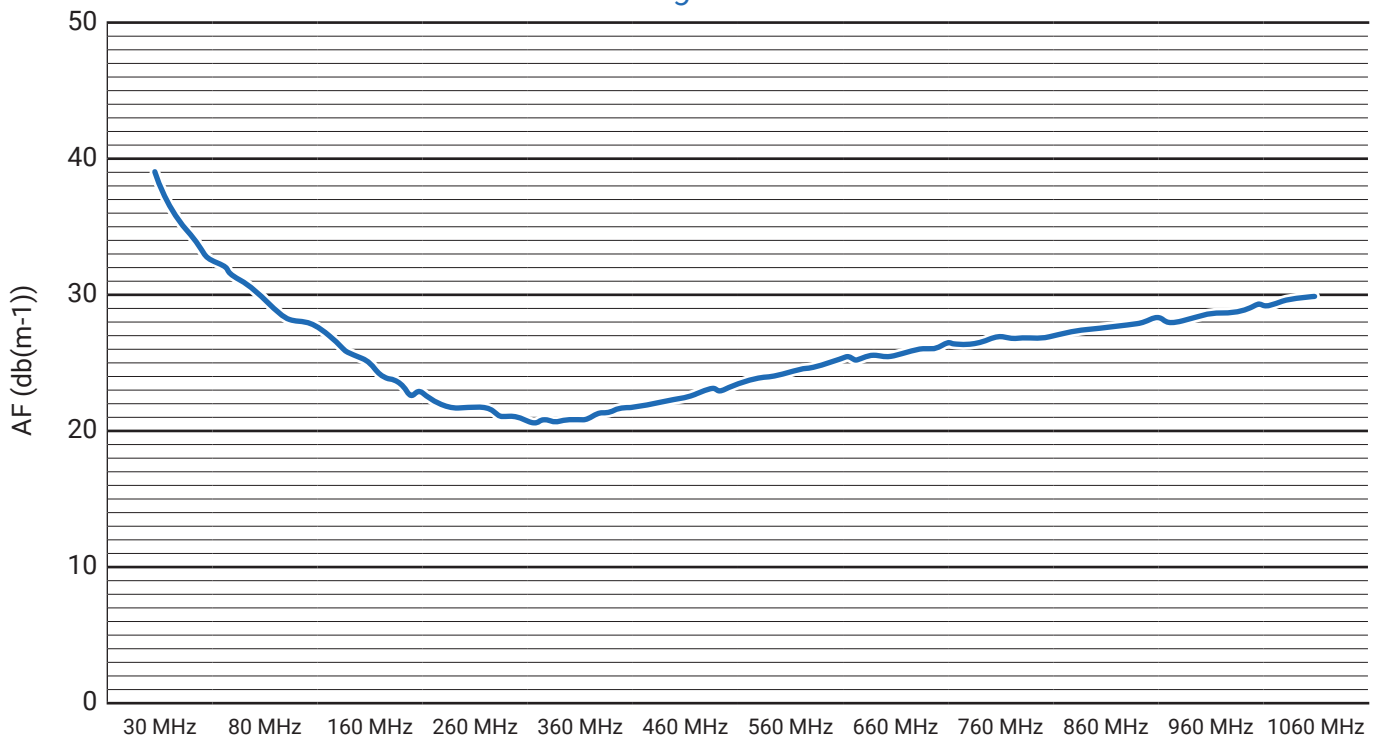
BicoLOG® 30100

| | | | |
|-------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance | 50 Ohm |
| Weight | 350 g | Calibration Points | 104 (5 MHz and 10 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 30 MHz – 1 GHz | Tripod Socket | 1/4" |
| Gain | -39 dBi – 1 dBi | Antenna Factor | 20 – 41 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 30100



Antenna Factor Diagram BicoLOG 30100

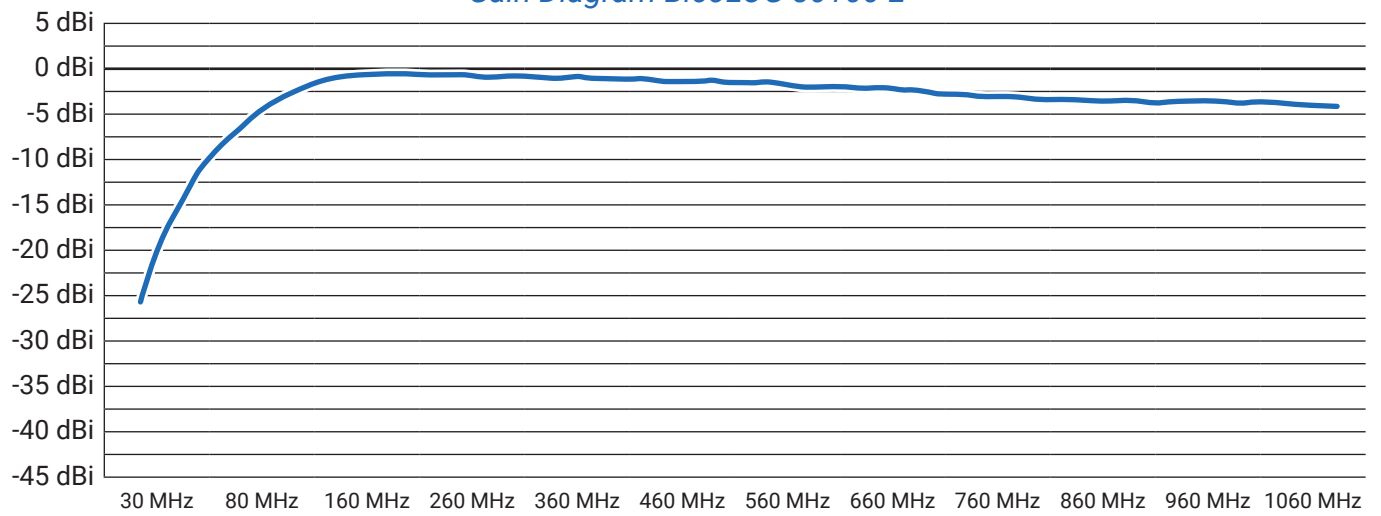


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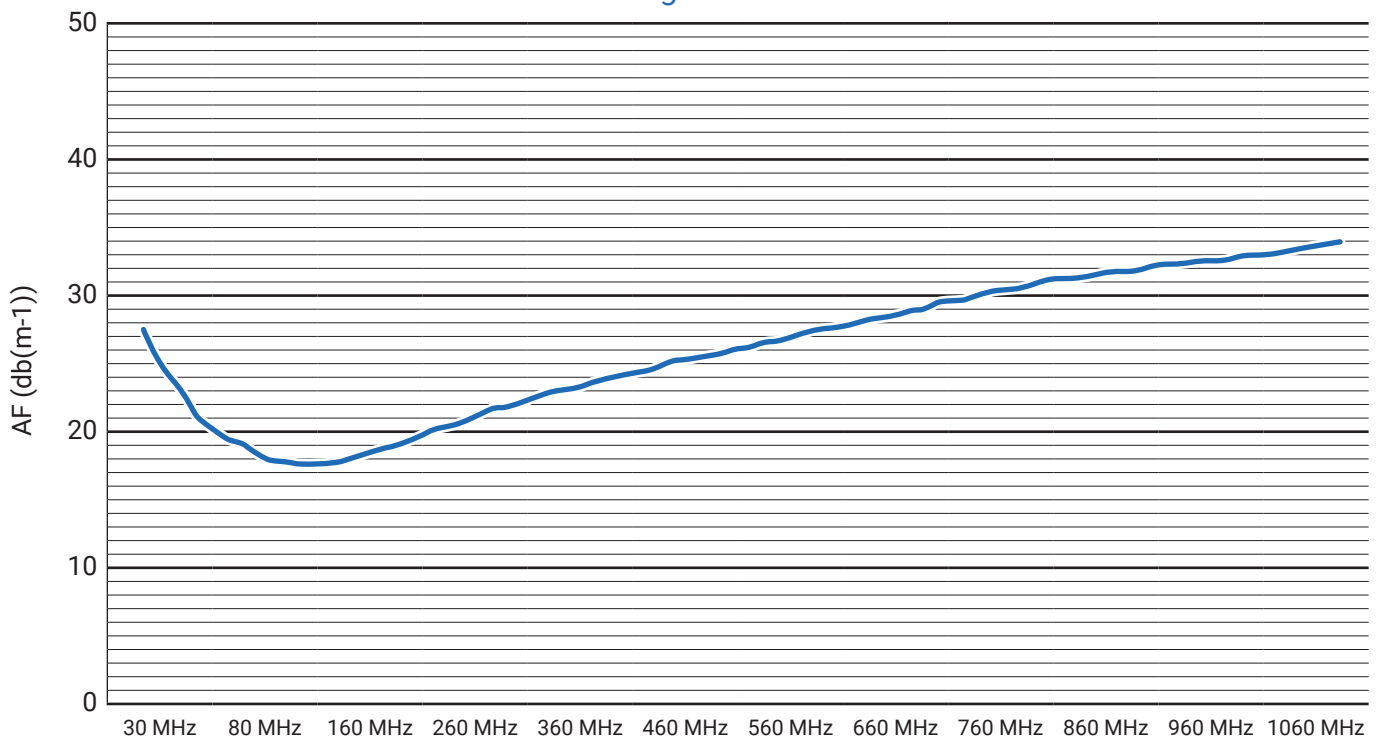
BicoLOG® 30100 E

| | | | |
|-------------------------|--------------------|--------------------|---------------------------|
| Dimensions [L x W x D] | 540 x 225 x 225 mm | Nominal Impedance | 50 Ohm |
| Weight | 1150 g | Calibration Points | 194 (5 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 30 MHz – 1 GHz | Tripod Socket | 1/4" |
| Gain | -31 dBi – 1 dBi | Antenna Factor | 17 – 31 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 30100 E



Antenna Factor Diagram BicoLOG 30100 E

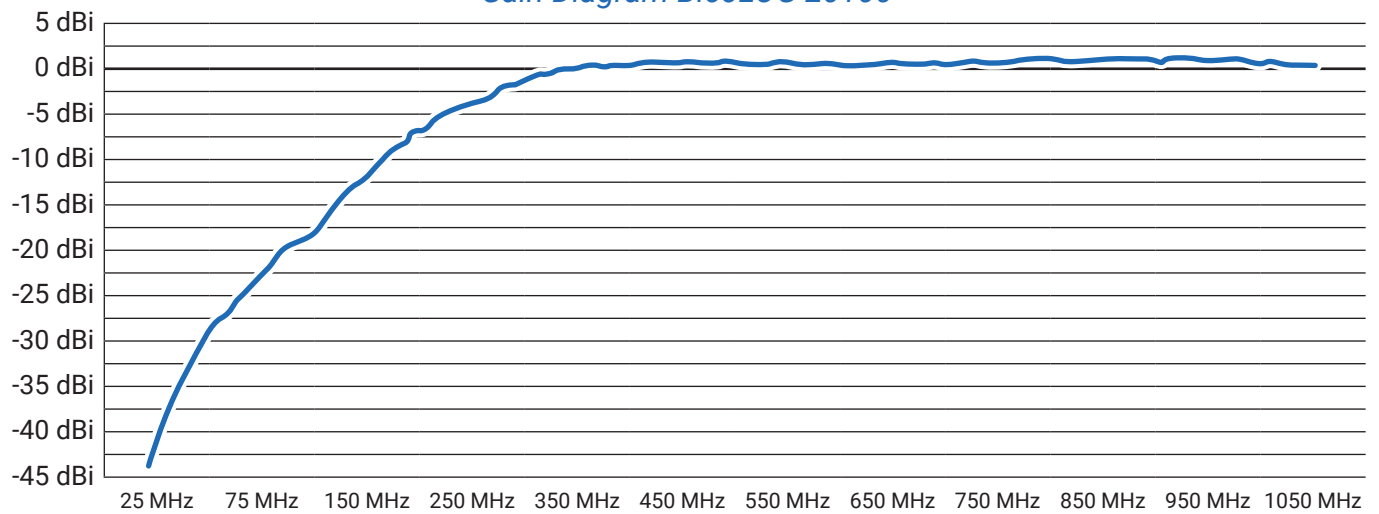


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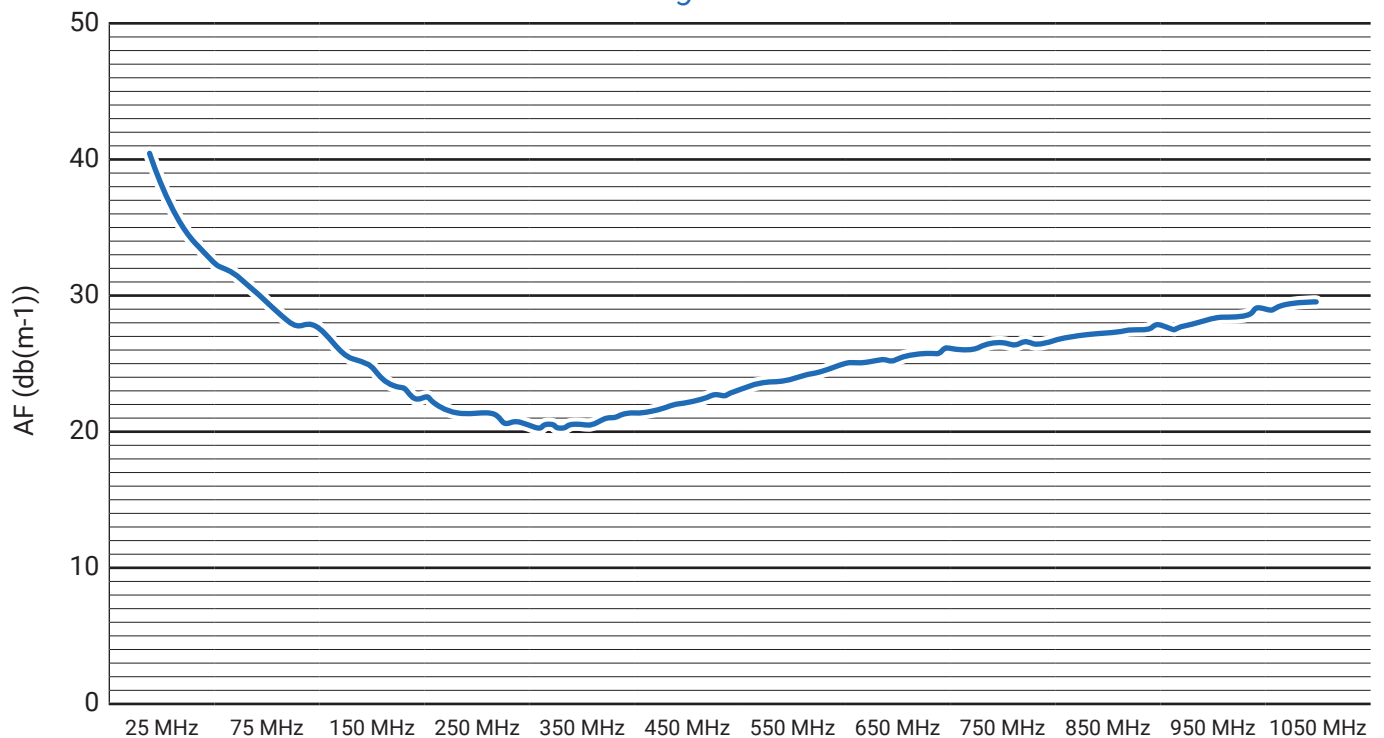
BicoLOG® 20100

| | | | |
|-------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance | 50 Ohm |
| Weight | 350 g | Calibration Points | 106 (5 MHz and 10 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 20 MHz – 1 GHz | Tripod Socket | 1/4" |
| Gain | -45 dBi – 1 dBi | Antenna Factor | 20 – 42 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 20100



Antenna Factor Diagram BicoLOG 20100

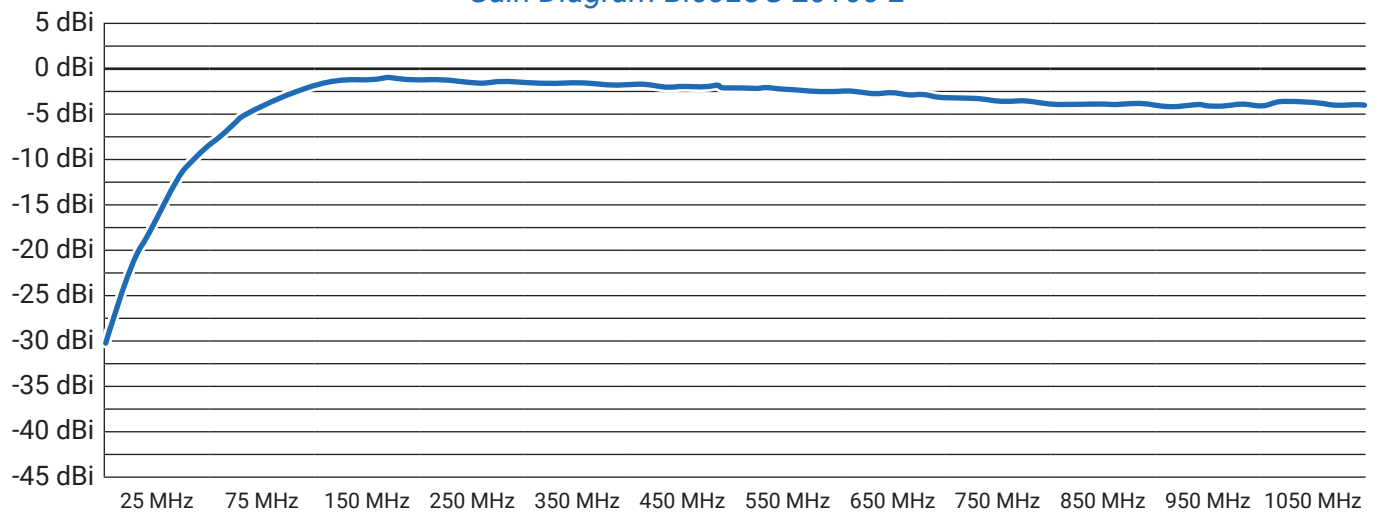


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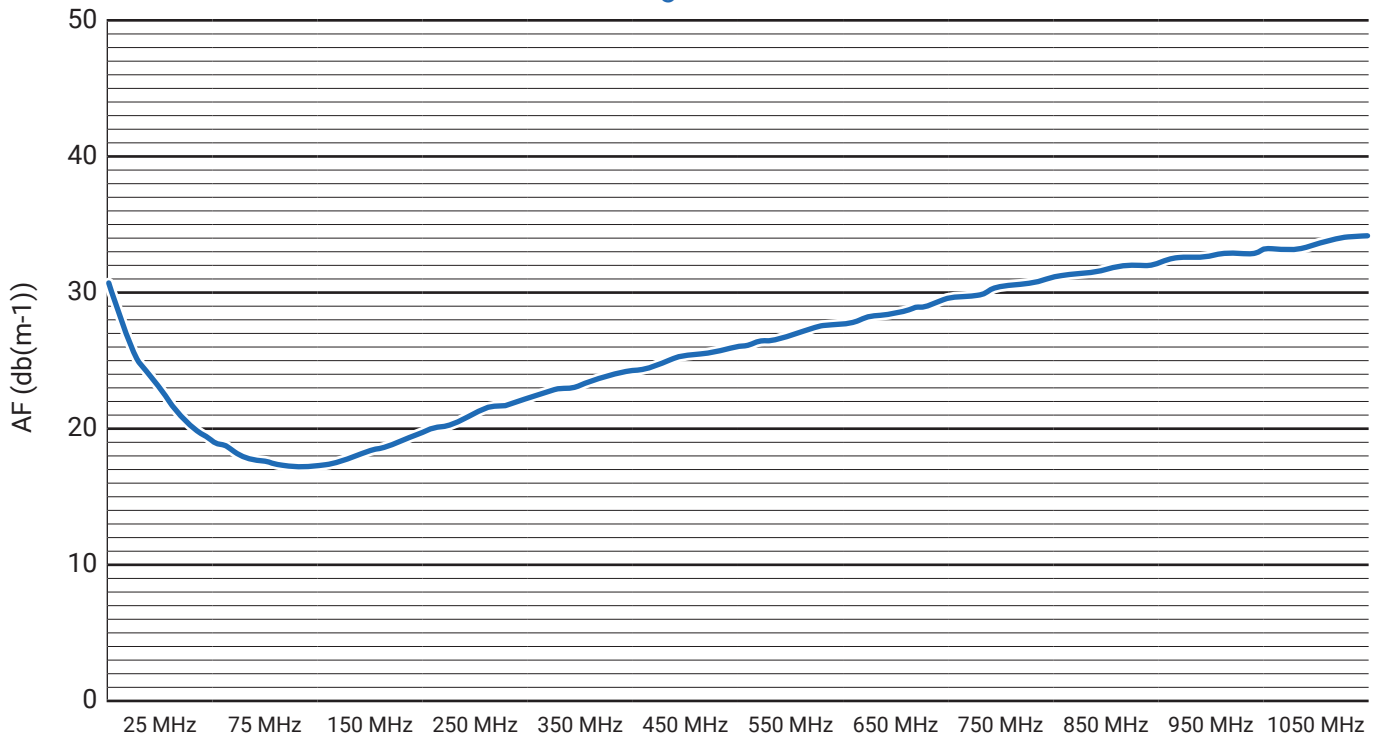
BicoLOG® 20100 E

| | | | |
|-------------------------|--------------------|--------------------|---------------------------|
| Dimensions [L x W x D] | 540 x 225 x 225 mm | Nominal Impedance | 50 Ohm |
| Weight | 1150 g | Calibration Points | 196 (5 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 20 MHz – 1 GHz | Tripod Socket | 1/4" |
| Gain | -38 dBi – 1 dBi | Antenna Factor | 17 – 34 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 20100 E



Antenna Factor Diagram BicoLOG 20100 E

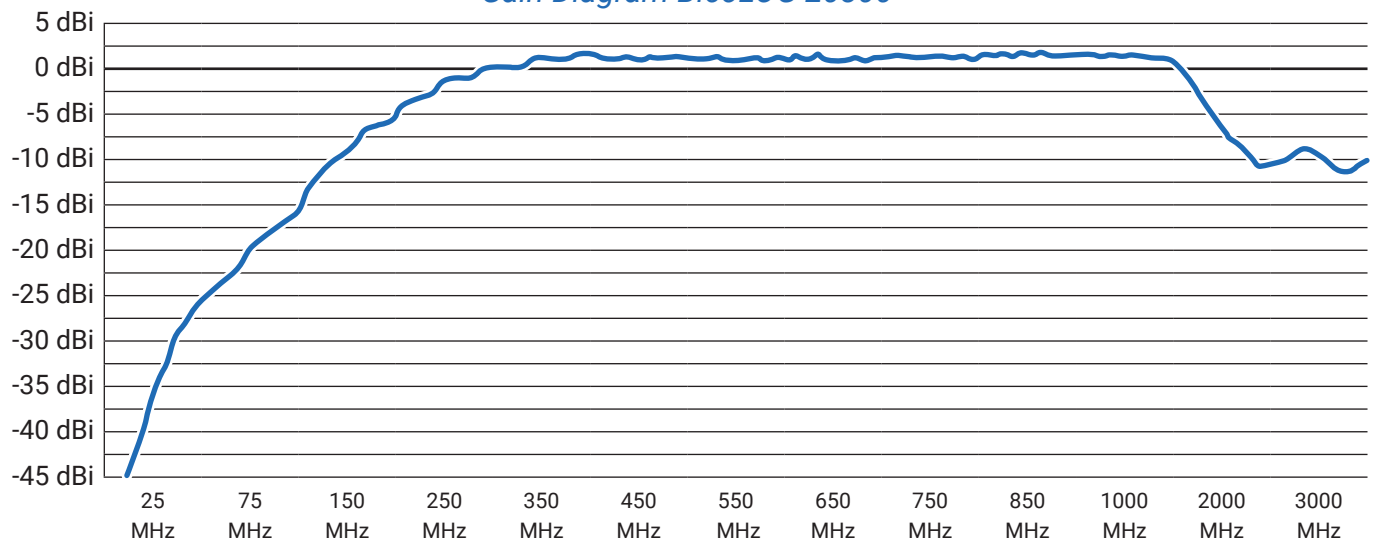


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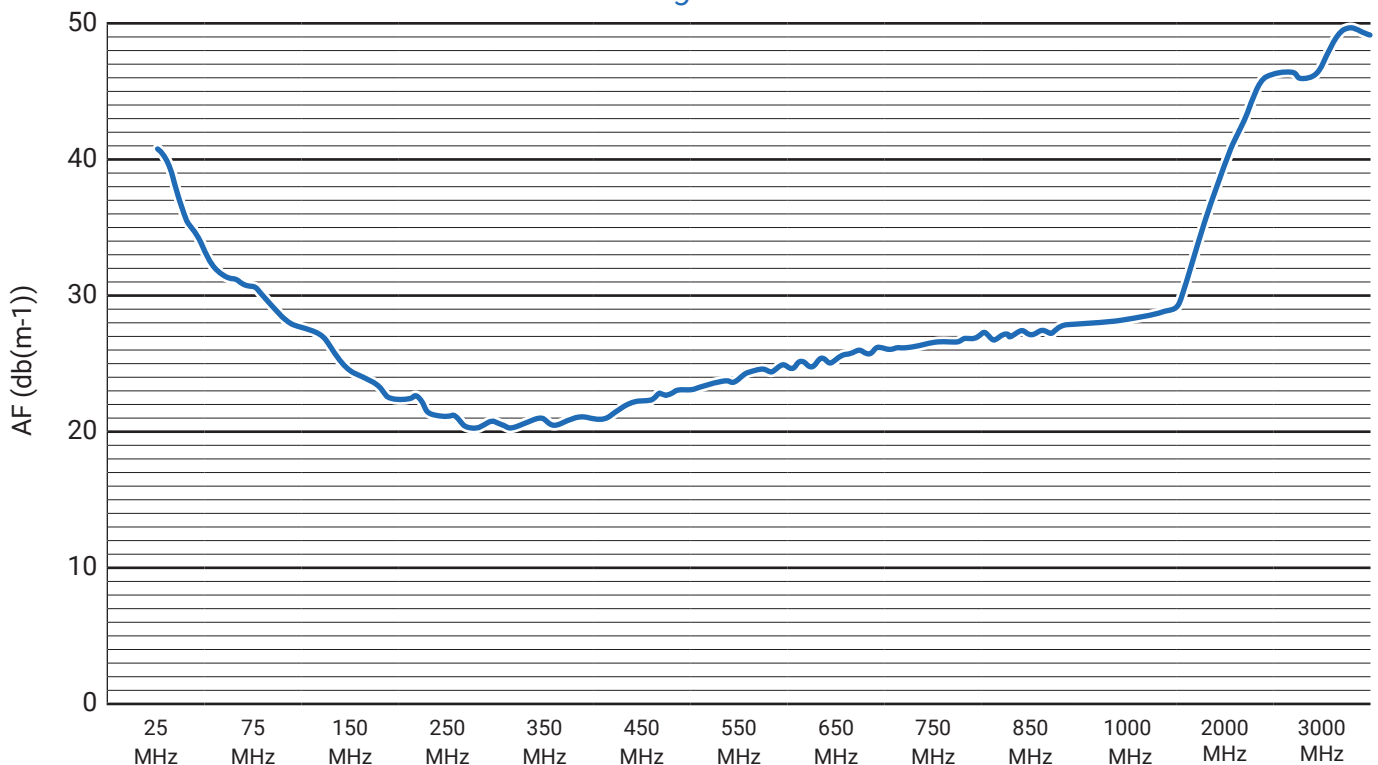
BicoLOG® 20300

| | | | |
|-------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance | 50 Ohm |
| Weight | 350 g | Calibration Points | 296 (5 MHz and 10 MHz steps) |
| Design | Biconical | RF Connection | SMA (f) or N with adapter |
| Frequency Range | 20 MHz – 3 GHz | Tripod Socket | 1/4" |
| Gain | -45 dBi – 1 dBi | Antenna Factor | 20 – 51 dB/m |
| Max. Transmission Power | 5 W AM (100 MHz) | | |

Gain Diagram BicoLOG 20300



Antenna Factor Diagram BicoLOG 20300



Recommended Accessories



Multifunctional Pistol Grip

(strongly recommended)

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

Order/Art.-No.: 282

1 m / 5 m / 10 m SMA Cable

High-quality special SMA cable, connecting test equipment to any BicoLOG® 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

This special high-quality adapter allows for operating all BicoLOG® 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

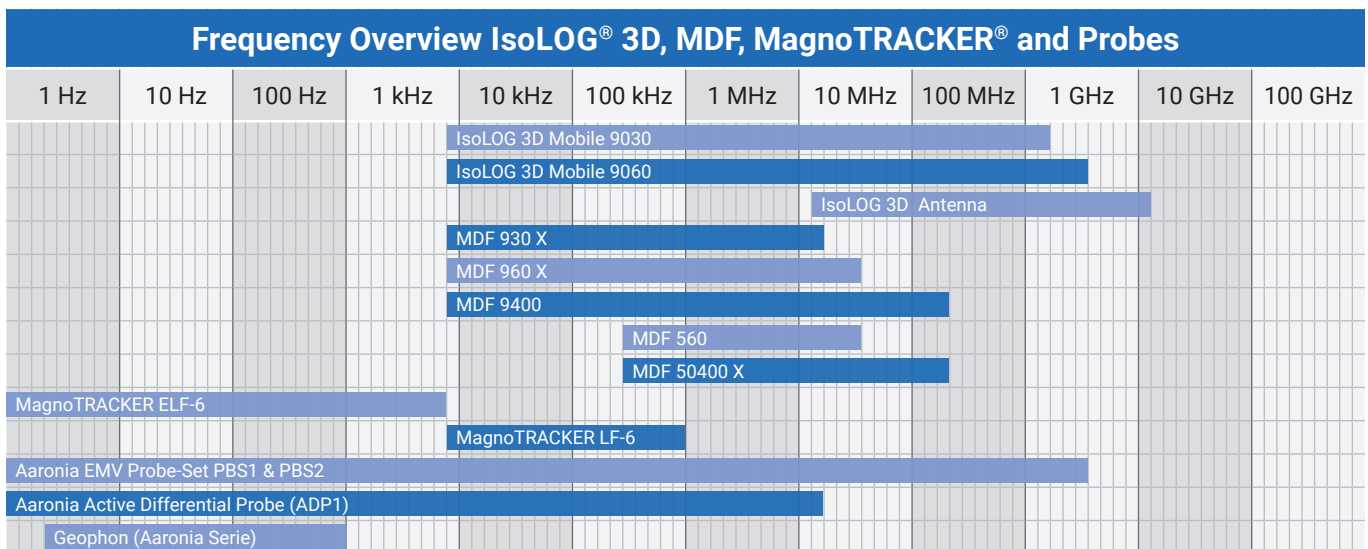
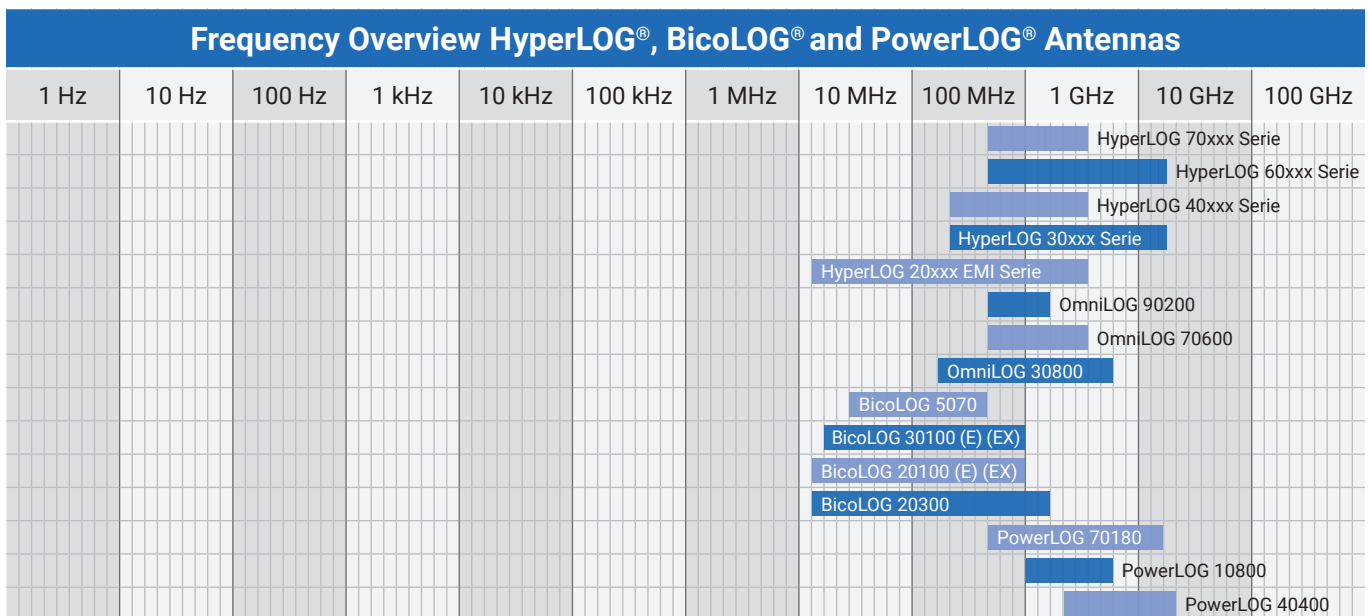
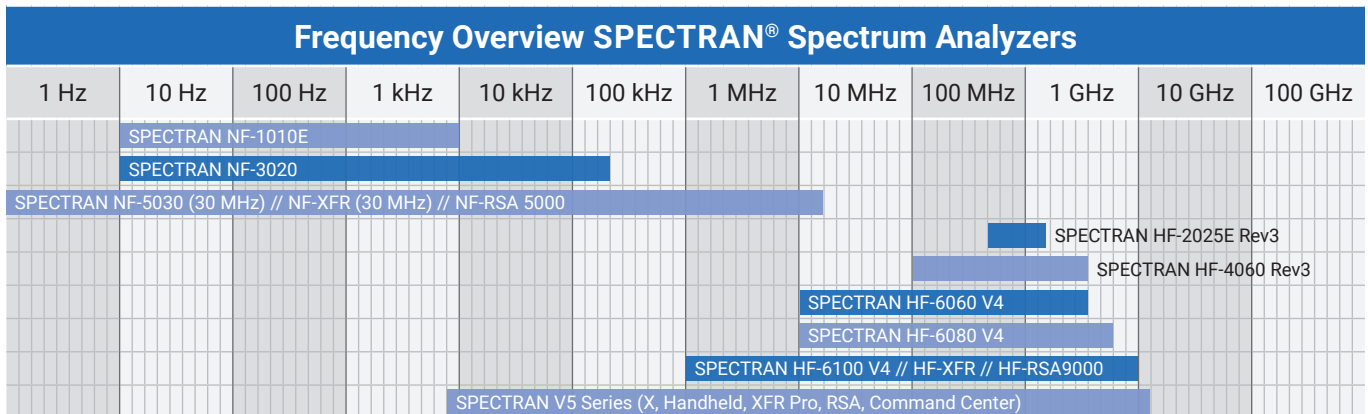
Miniature Pistol-Grip Tripod

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



Frequency Overviews



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
- **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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