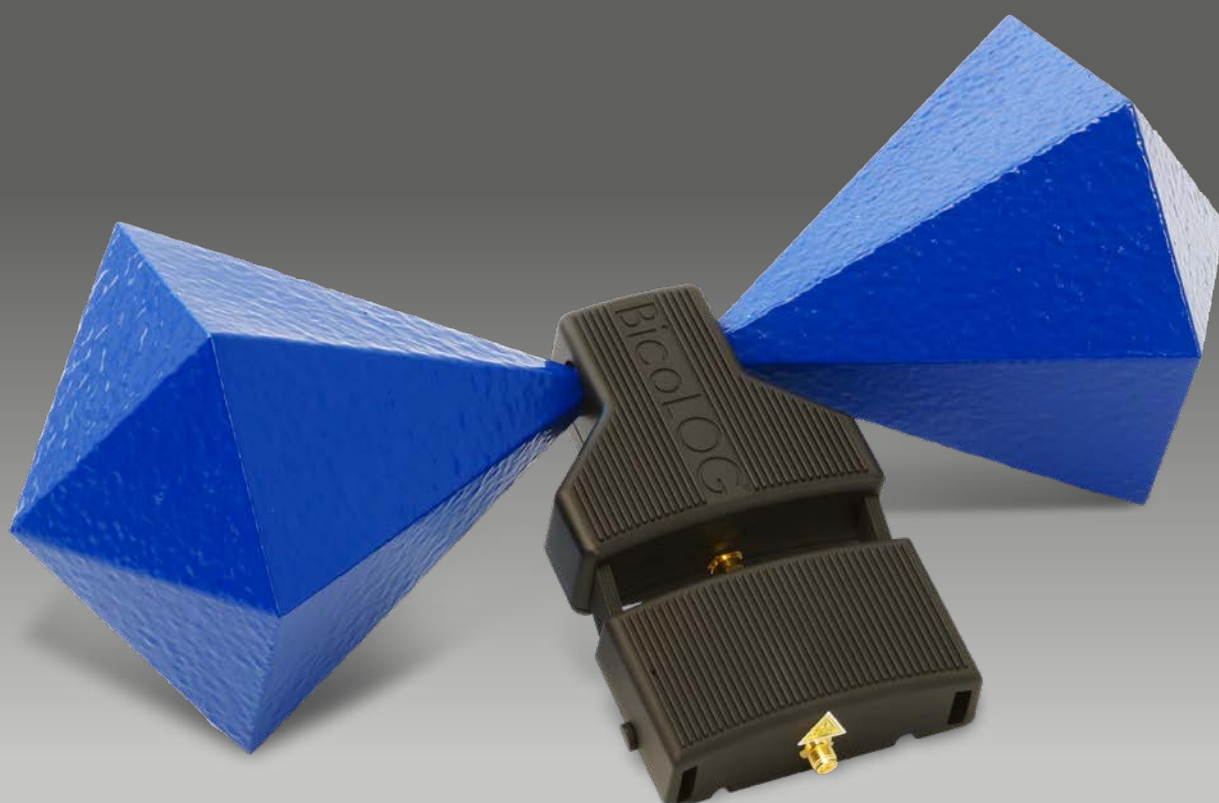


ACTIVE BICONICAL ANTENNAS

# BICOLOG<sup>®</sup> X

SERIES

Broadband transmission and reception from 20 MHz to 3 GHz – Mobile and Stationary



## Highlights:

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

  
**AARONIA AG**  
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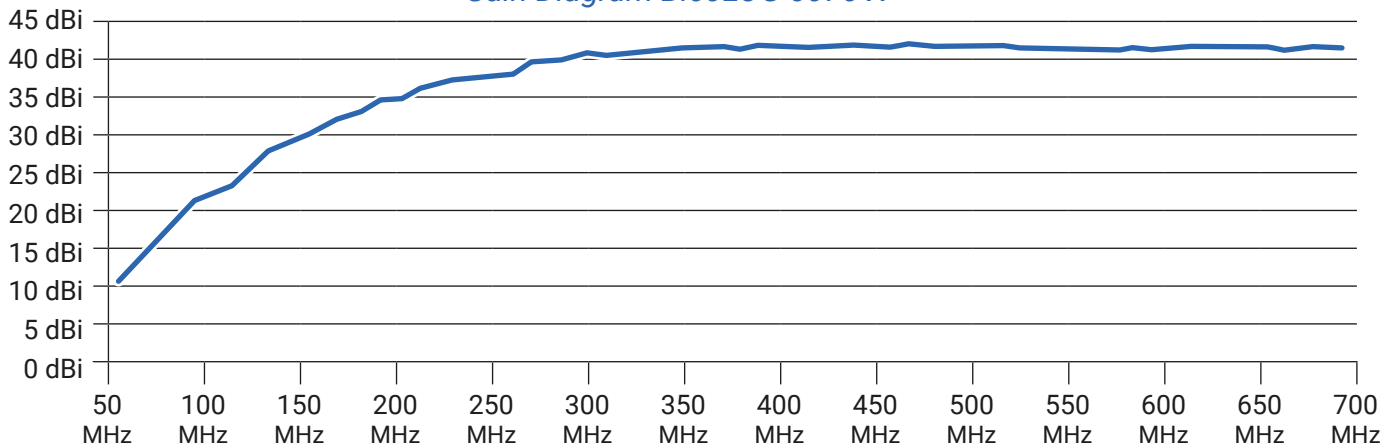
MADE IN GERMANY

# Specifications

## BicoLOG® 5070 X

|                        |                    |                    |                             |
|------------------------|--------------------|--------------------|-----------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance  | 50 Ohm                      |
| Weight                 | 500 g              | Calibration Points | 70 (5 MHz and 10 MHz steps) |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter   |
| Frequency Range        | 50 MHz – 700 MHz   | Tripod Socket      | 1/4"                        |
| Gain                   | 11 dBi – 41 dBi    | Warranty           | 10 years                    |

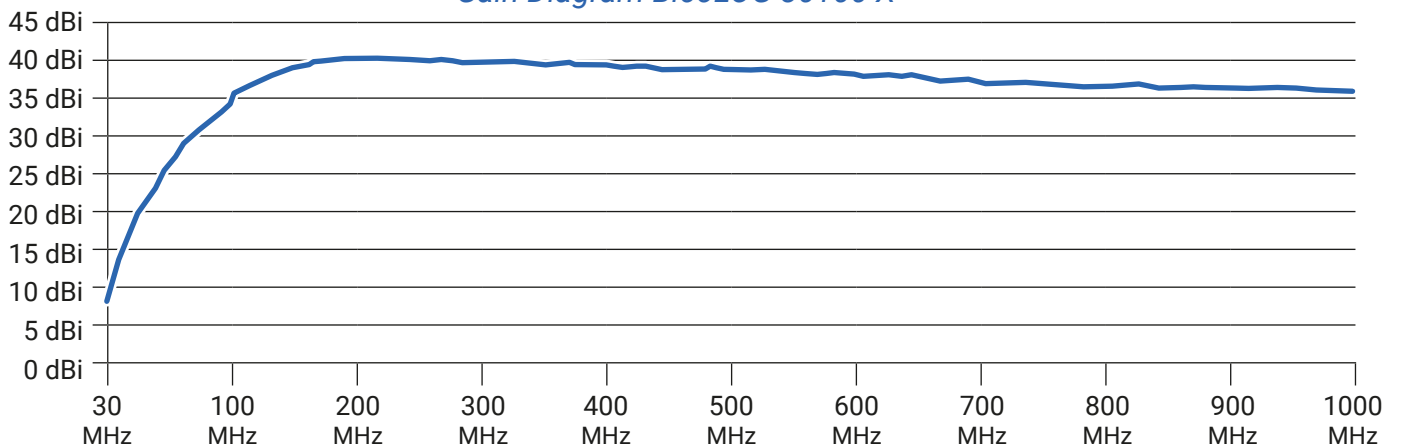
Gain Diagram BicoLOG 5070 X



## BicoLOG® 30100 X

|                        |                    |                    |                              |
|------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance  | 50 Ohm                       |
| Weight                 | 500 g              | Calibration Points | 104 (5 MHz and 10 MHz steps) |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter    |
| Frequency Range        | 30 MHz – 1 GHz     | Tripod Socket      | 1/4"                         |
| Gain                   | 1 dBi – 41 dBi     | Warranty           | 10 years                     |

Gain Diagram BicoLOG 30100 X

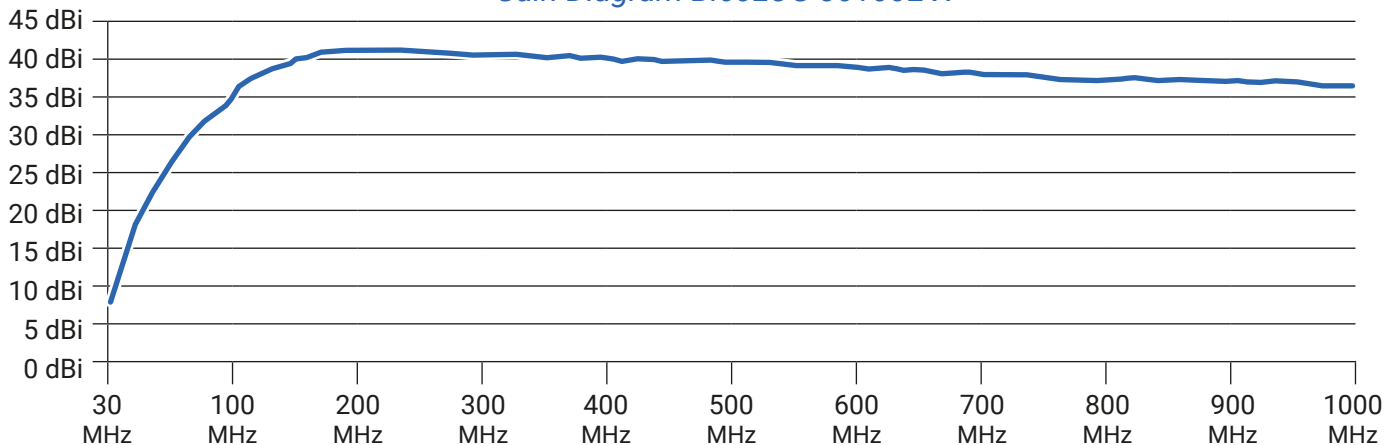


# Specifications

## BicoLOG® 30100E X

|                        |                    |                    |                           |
|------------------------|--------------------|--------------------|---------------------------|
| Dimensions [L x W x D] | 540 x 225 x 225 mm | Nominal Impedance  | 50 Ohm                    |
| Weight                 | 1300 g             | Calibration Points | 194 (5 MHz steps)         |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter |
| Frequency Range        | 30 MHz – 1 GHz     | Tripod Socket      | 1/4"                      |
| Gain                   | 9 dBi – 41 dBi     | Warranty           | 10 years                  |

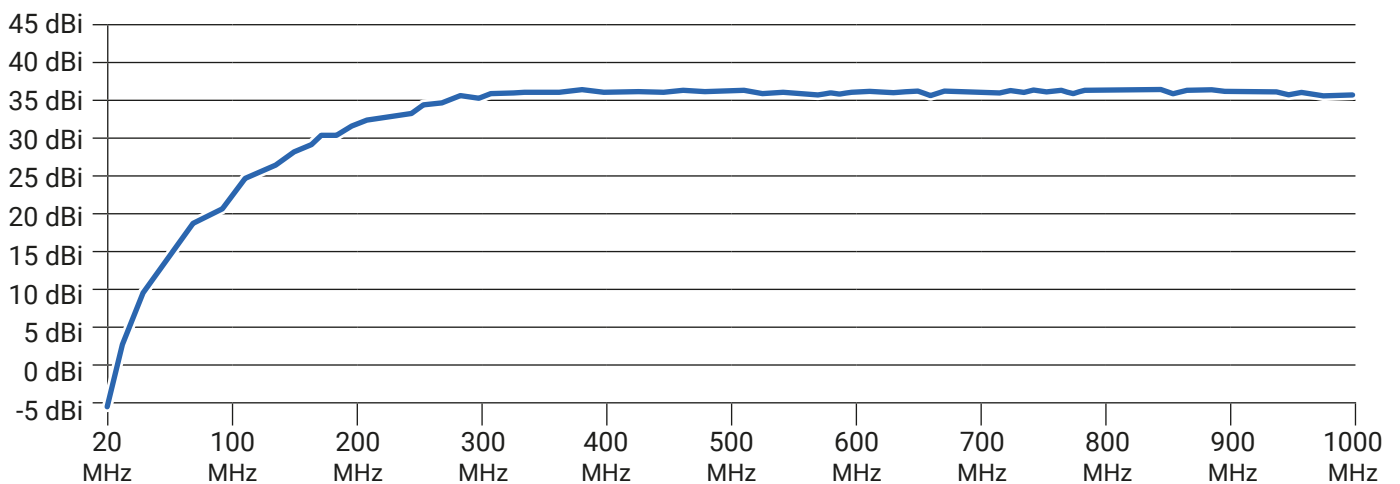
Gain Diagram BicoLOG 30100E X



## BicoLOG® 20100 X

|                        |                    |                    |                              |
|------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance  | 50 Ohm                       |
| Weight                 | 500 g              | Calibration Points | 106 (5 MHz and 10 MHz steps) |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter    |
| Frequency Range        | 20 MHz – 1 GHz     | Tripod Socket      | 1/4"                         |
| Gain                   | -5 dBi – 41 dBi    | Warranty           | 10 years                     |

Gain Diagram BicoLOG 20100 X

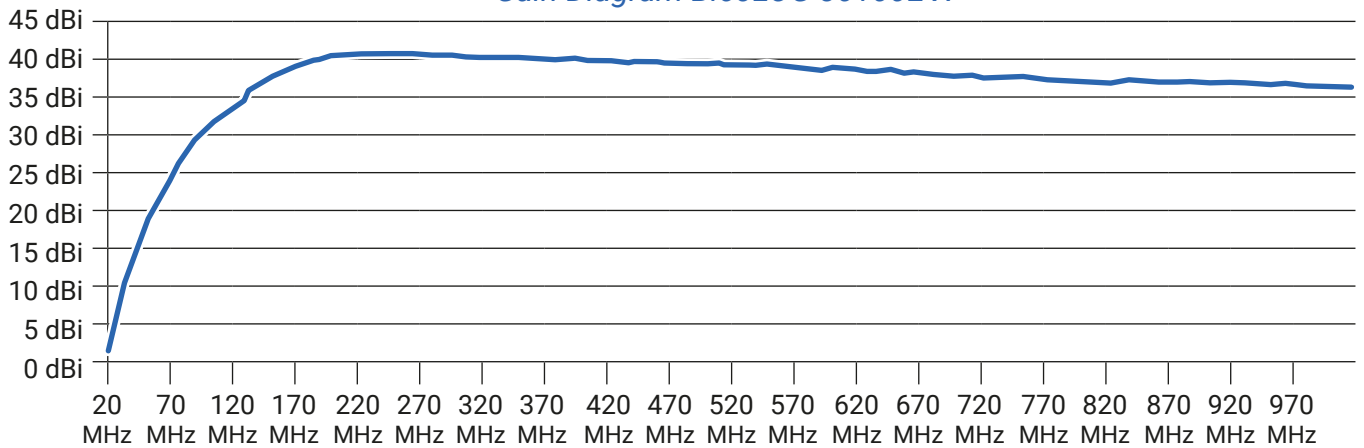


# Specifications

## BicoLOG® 20100E X

|                        |                    |                    |                           |
|------------------------|--------------------|--------------------|---------------------------|
| Dimensions [L x W x D] | 540 x 225 x 225 mm | Nominal Impedance  | 50 Ohm                    |
| Weight                 | 1300 g             | Calibration Points | 196 (5 MHz steps)         |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter |
| Frequency Range        | 20 MHz – 1 GHz     | Tripod Socket      | 1/4"                      |
| Gain                   | 2 dBi – 41 dBi     | Warranty           | 10 years                  |

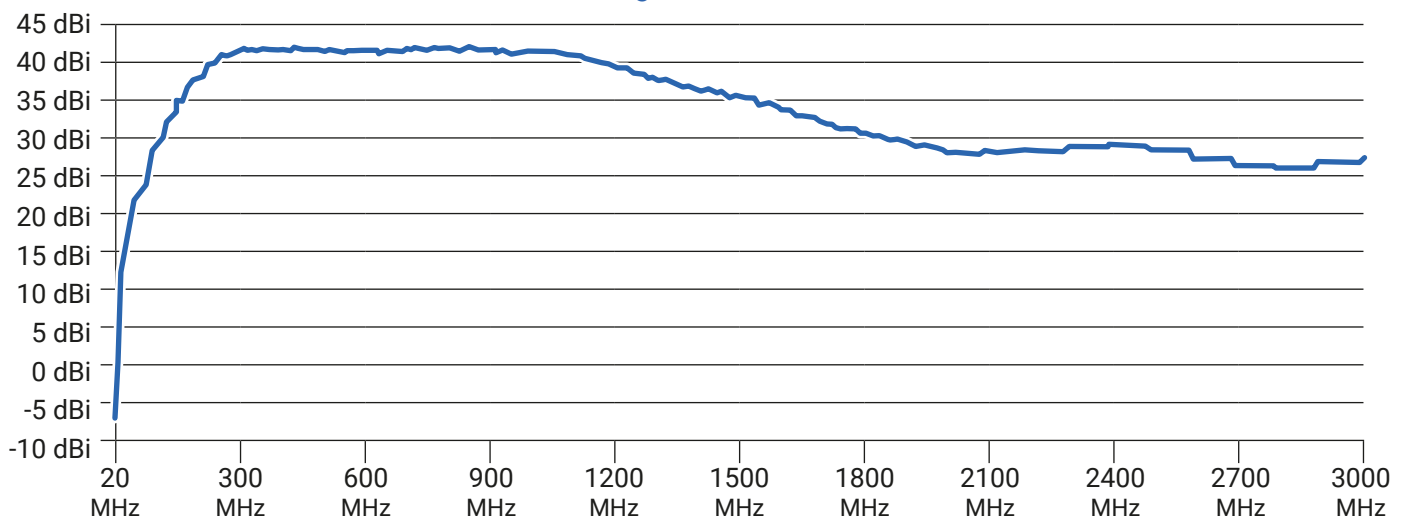
Gain Diagram BicoLOG 30100E X



## BicoLOG® 20300 X

|                        |                    |                    |                              |
|------------------------|--------------------|--------------------|------------------------------|
| Dimensions [L x W x D] | 350 x 160 x 140 mm | Nominal Impedance  | 50 Ohms                      |
| Weight                 | 500 g              | Calibration Points | 296 (5 MHz and 10 MHz steps) |
| Design                 | Active biconical   | RF Connection      | SMA (f) or N with adapter    |
| Frequency Range        | 20 MHz – 3 GHz     | Tripod Socket      | 1/4"                         |
| Gain                   | -5 dBi – 41 dBi    | Warranty           | 10 years                     |

Gain Diagram BicoLOG 20100 X



# Recommended Accessories



## Multifunctional Pistol Grip

(strongly recommended)

Highly recommended for our BicoLOG® 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

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**

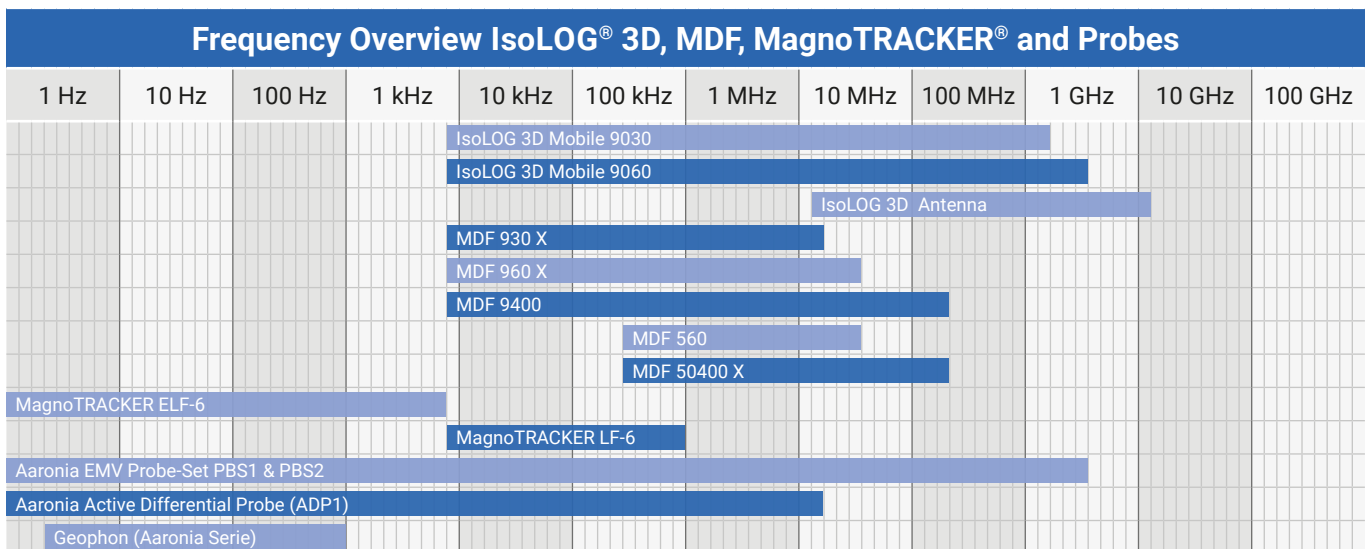
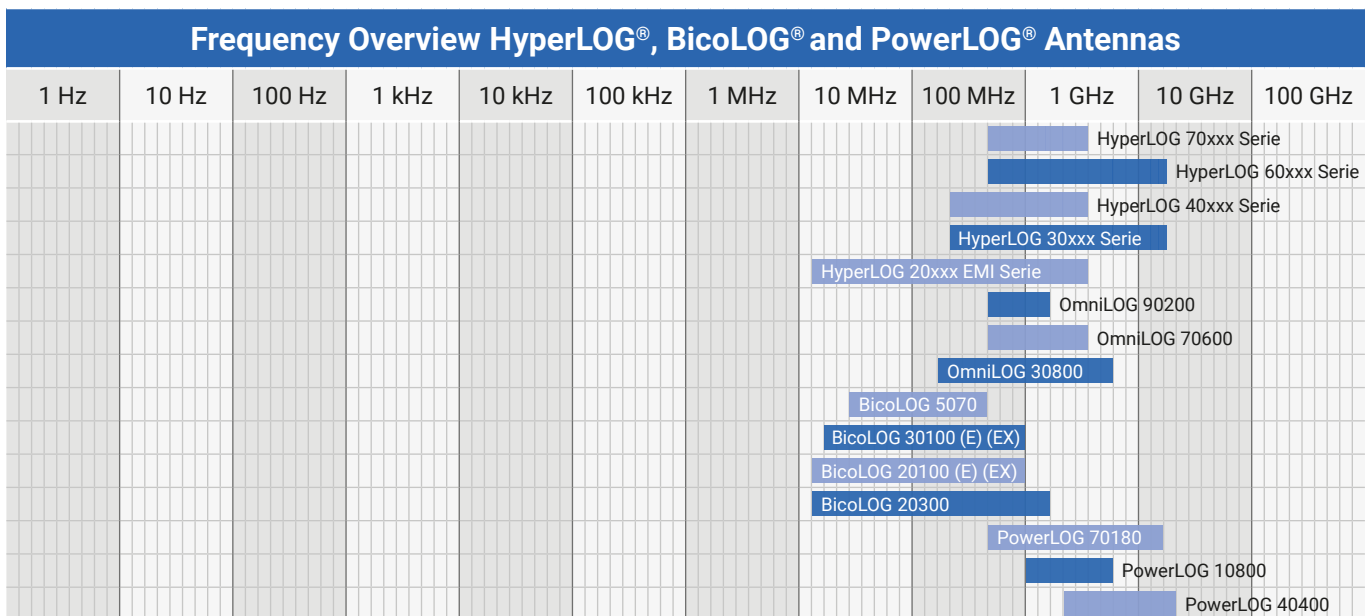
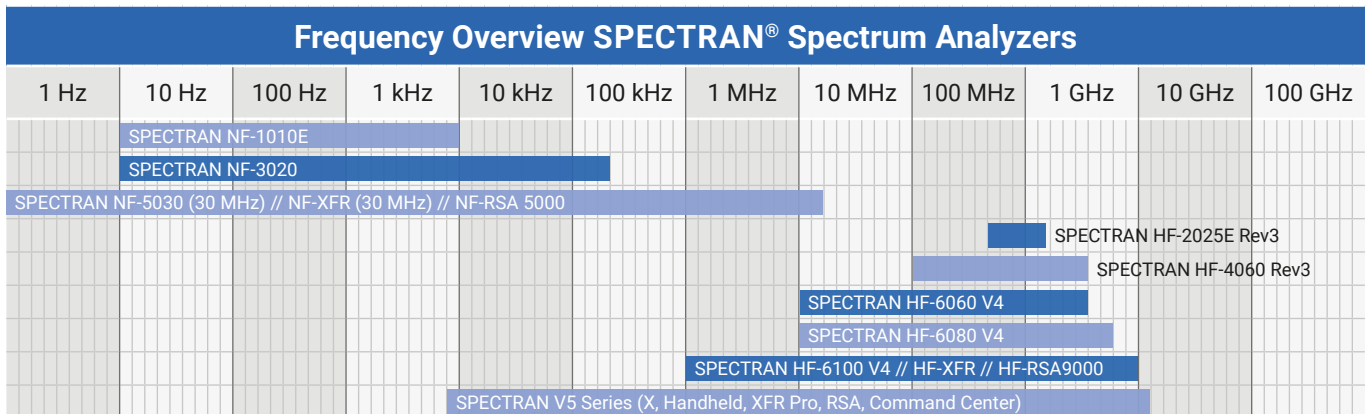
## Miniature Pistol-Grip Tripod

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 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
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- **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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