



Rev 2.0
19.09.2014

Biconical EMC broadband antennas - BicoLOG Series

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

Highlights:

- ◆ Only a single broadband test antenna for the complete frequency range from 20MHz up to 3GHz
- ◆ Optimal for usage with spectrum analysers for EMC measurement
- ◆ Suitable for mobile use
- ◆ Small weight and dimensions
- ◆ Made in Germany
- ◆ **10 years warranty**

Calibration & standards:

- ◆ The biconical antennas of the BicoLOG® series are suitable for EMI 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 measurements 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:

- ◆ BicoLOG® EMI testantenna
- ◆ **Typical calibration data with up to 106 calibration points (5MHz and 10MHz steps!)**

References / examples of proof:

- ◆ NATO, Belgium
- ◆ Rohde & Schwarz Rome, Italy
- ◆ EADS, Germany
- ◆ Robert Bosch GmbH, Germany
- ◆ Australian Government Department of Defence, Australia
- ◆ Eurocontrol, Netherlands

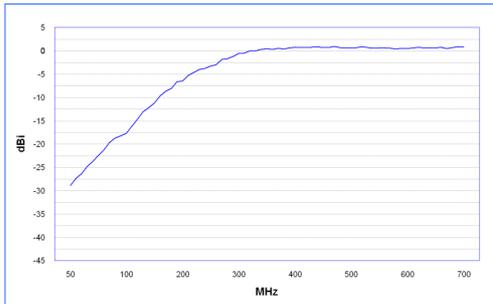


Specifications

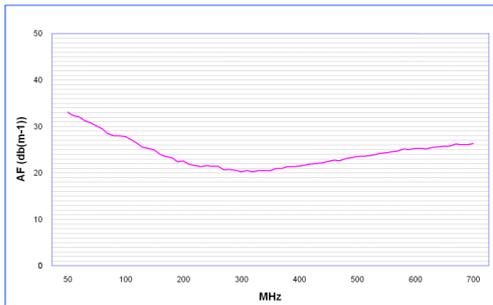
BicoLOG® 5070

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **50MHz to 700MHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-29dBi to 1dBi**
- ◆ Antenna factor: **20-33dB/m**
- ◆ Calibration points: **70** (5MHz and 10MHz steps)
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (350x160x140)mm
- ◆ Weight: 350gr
- ◆ **Warranty: 10 years**

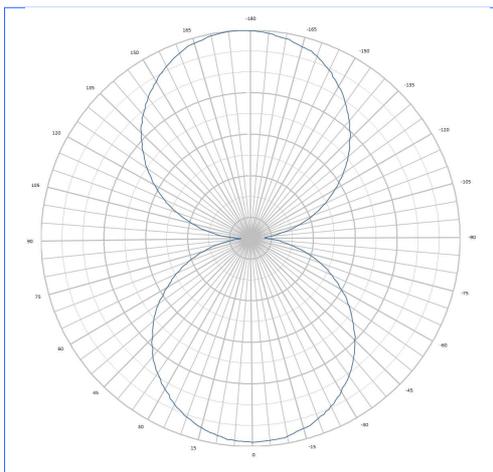
Gain Diagram BicoLOG 5070



Antenna factor BicoLOG 5070



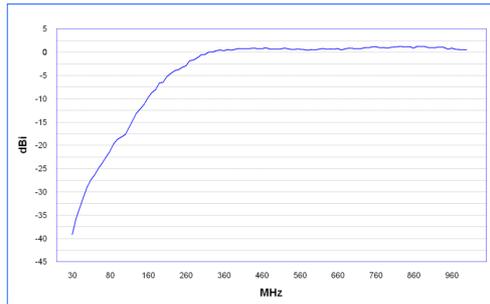
Horizontal Pattern (typical) BicoLOG Antennas



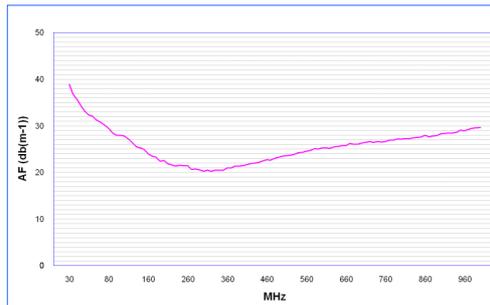
BicoLOG® 30100

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **30MHz to 1GHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-39dBi to 1dBi**
- ◆ Antenna factor: **20-41dB/m**
- ◆ Calibration points: **104** (5MHz and 10MHz steps)
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (350x160x140)mm
- ◆ Weight: 350gr
- ◆ **Warranty: 10 years**

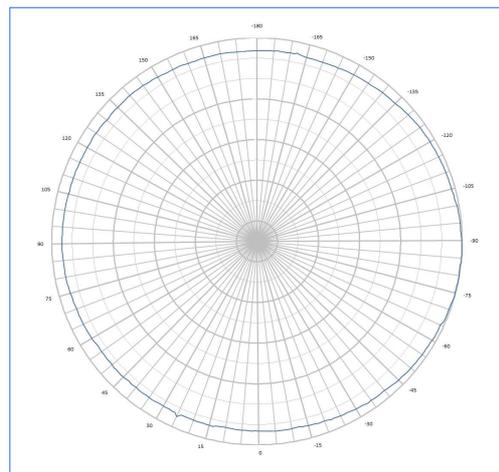
Gain Diagram BicoLOG 30100



Antenna factor BicoLOG 30100



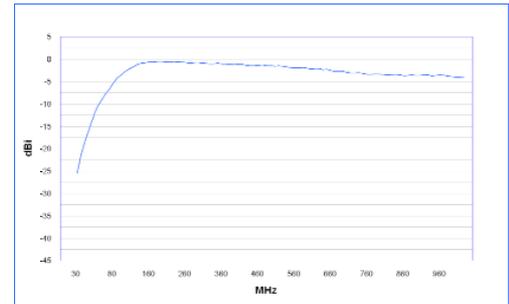
Vertical Pattern (typical) BicoLOG Antennas



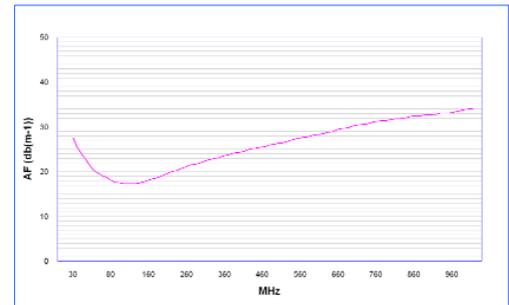
NEW: BicoLOG® 30100E

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **30MHz to 1GHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-31dBi to 1dBi**
- ◆ Antenna factor: **17-31dB/m**
- ◆ Calibration points: **194 (5MHz steps)**
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (540x225x225)mm
- ◆ Weight: 1150gr
- ◆ **Warranty: 10 years**
- ◆ **Optimized for EMC measurements**

Gain Diagram BicoLOG 30100E



Antenna factor BicoLOG 30100E



BicoLOG® 20100

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **20MHz to 1GHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-45dBi** to 1dBi
- ◆ Antenna factor: **20-42dB/m**
- ◆ Calibration points: **106** (5MHz and 10MHz steps)
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (350x160x140)mm
- ◆ Weight: 350gr
- ◆ **Warranty: 10 years**

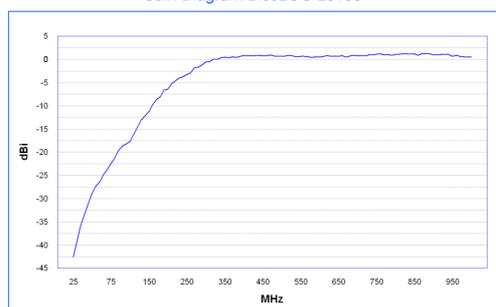
NEW: BicoLOG® 20100E

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **20MHz to 1GHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-38dBi** to 1dBi
- ◆ Antenna factor: **17-34dB/m**
- ◆ Calibration points: **196** (**5MHz steps**)
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (540x225x225)mm
- ◆ Weight: 1150gr
- ◆ **Warranty: 10 years**
- ◆ **Optimized for EMC measurements**

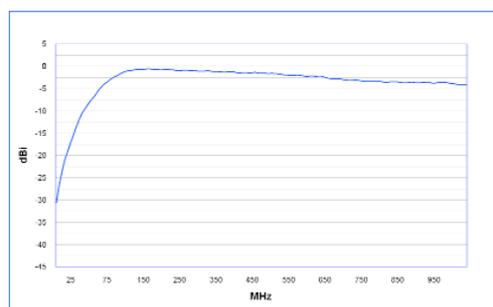
BicoLOG® 20300

- ◆ Design: Biconical Antenna
- ◆ Frequency range: **20MHz to 3GHz**
- ◆ Max. transmission power: 5W AM (100MHz)
- ◆ Nominal impedance: 50 Ohms
- ◆ Gain: **-45dBi** to 1dBi
- ◆ Antenna factor: **20-51dB/m**
- ◆ Calibration points: **296** (5MHz and 10MHz steps)
- ◆ RF connection: SMA (female) or N with adapter
- ◆ Tripod socket: 1/4"
- ◆ Dimensions (L/W/D) : (350x160x140)mm
- ◆ Weight: 350gr
- ◆ **Warranty: 10 years**

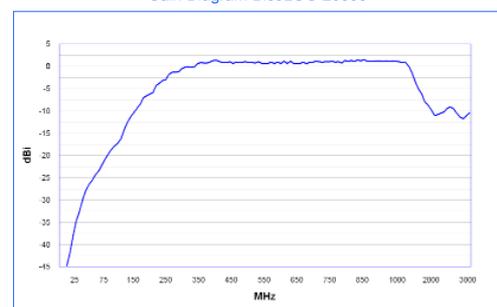
Gain Diagram BicoLOG 20100



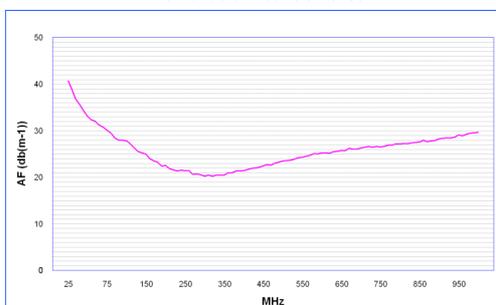
Gain Diagram BicoLOG 20100E



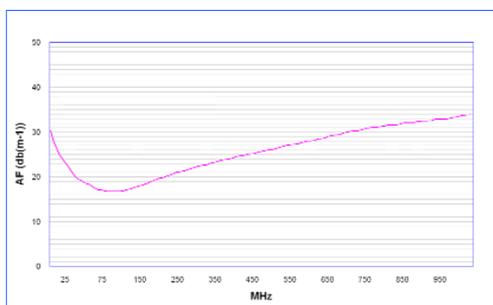
Gain Diagram BicoLOG 20300



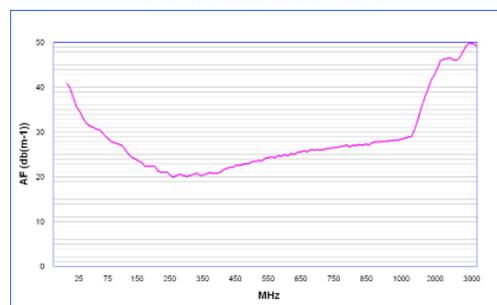
Antenna factor BicoLOG 20100



Antenna factor BicoLOG 20100E



Antenna factor BicoLOG 20300



Recommended accessories for Aaronia Antennas

Heavy Plastic Carrycase PRO

Shock resistant, heavy version with padding. Offers space foam for all BicoLOG® antennas with all accessories. A MUST for the professional user or outdoor usage! Already included with each BicoLOG 30100E or 20100E antenna.

Order/Art.-No.: 244



1m / 5m / 10m SMA-Cable

High quality special SMA cable for connecting any BicoLOG®-Antenna with various test equipment like SPECTRAN 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.: 771 (1m Cable), 772 (5m Cable), 773 (10m Cable)



SMA to N Adapter

This special high quality adapter allows operation of all BicoLOG®-Antenna with any standard spectrum-analyzer with N connector.

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 BicoLOG antennas. Quick and easy change of antenna polarization, perfect antenna handling (even with the more heavy BicoLOG X-Series).

Order/Art.-No.: 282



