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 test antenna
- Typical calibration data with up to 106 calibration points (5MHz and 10MHz steps!)

References / examples of proof:
- NATO, Belgium
- Rohde & Schwarz Rome, Italy
- EADS (European Aeronautic Defence & Space Company), 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: 1W (30dBm or 0dBW)
- 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

**BicoLOG® 30100**
- Design: Biconical Antenna
- Frequency range: 30MHz to 1GHz
- Max. transmission power: 1W (30dBm or 0dBW)
- 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

**NEW: BicoLOG® 30100E**
- Design: Biconical Antenna
- Frequency range: 30MHz to 1GHz
- Max. transmission power: 1W (30dBm or 0dBW)
- 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

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**Gain Diagram BicoLOG 5070**

**Gain Diagram BicoLOG 30100**

**Gain Diagram BicoLOG 30100E**

**Antenna factor BicoLOG 5070**

**Antenna factor BicoLOG 30100**

**Antenna factor BicoLOG 30100E**

**Horizontal Pattern (typical) BicoLOG Antennas**

**Vertical Pattern (typical) BicoLOG Antennas**
**BicoLOG® 20100**
- Design: Biconical Antenna
- Frequency range: 20MHz to 1GHz
- Max. transmission power: 1W (30dBm or 0dbW)
- Nominal impedance: 50 Ohms
- Gain: -45dBi to 1dBi
- Antenna factor: 20-42dB/m
- Calibration points: 106 (5MHz and 10MHz steps)
- RF connection: N (female) or SMA 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: 30MHz to 1GHz
- Max. transmission power: 1W (30dBm or 0dbW)
- Nominal impedance: 50 Ohms
- Gain: -38dBi to 1dBi
- Antenna factor: 17-34dB/m
- Calibration points: 196 (5MHz steps)
- RF connection: N (female) or SMA 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: 1W (30dBm or 0dbW)
- Nominal impedance: 50 Ohms
- Gain: -45dBi to 1dBi
- Antenna factor: 20-51dB/m
- Calibration points: 296 (5MHz and 10MHz steps)
- RF connection: N (female) or SMA with adapter
- Tripod socket: 1/4"
- Dimensions (L/W/D): (350x160x140)mm
- Weight: 350gr
- Warranty: 10 years
Recommended accessories for Aaronia Antennas

**Heavy Plastic Carrycase PRO**
Schock resistant, heavy version with padding. Offers space foam for all BicoLOG® antennas with all accessories. A MUST for the professional user or outdoor usage!

*Order/Art.-No.: 244*

**1m / 5m / 10m SMA-Cable**
High quality special SMA cable for connecting any HyperLOG®-Antenna or BicoLOG®-Antenna with various test equipment like our 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 HyperLOG®-Antenna with any standard spectrum-analyzer with N connector. Also this adapter is needed to connect BicoLOG® antennas to a Spectran Spectrum Analyzer.
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*

**Pistol grip / miniature tripod**
Detachable handle with super-practical miniature tripod mode: this handle is attachable to the backside of the unit and allows optimal handling (esp. for directional measurement) and even fixed installation of the unit. STRONGLY recommended for PC use!

*Order/Art.-No.: 280*