

Rev 1.0  
08.07.2014

# High Power Horn Antennas - PowerLOG® Series

Frequency Range 700MHz - 18GHz, High Gain and High Max. Power

## Highlights:

- ◆ Supports very high power up to 500W (peak)
- ◆ Ultra wide frequency range, max. 700MHz to 18GHz
- ◆ Incl. specific calibration data
- ◆ Perfectly usable for EMC immunity tests with very high field strength
- ◆ Robust N-connector (female)
- ◆ Compact design, lightweight
- ◆ 10 years warranty
- ◆ Made in Germany

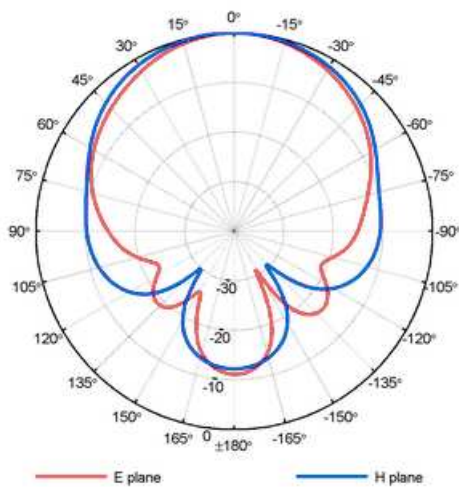


Made in Germany



## PowerLOG 10800

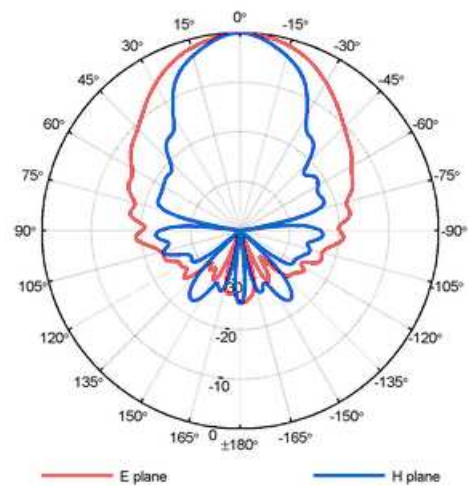
- ◆ Frequency range: **1GHz - 8GHz**
- ◆ Max. Input Power: **400W (peak), 200W (CW)**
- ◆ Gain: **4 to 13dBi**
- ◆ VSWR (typ): < 2,5:1
- ◆ Design: Double Ridge Horn
- ◆ Nominal impedance: 50 Ohm
- ◆ RF-connector: N (female)
- ◆ Temperature range: - 40°C to +85°C
- ◆ Dimensions (L/W/D): 235 x 252 x 175 mm
- ◆ Relative Humidity: 0% to 95%
- ◆ Weight: 1400gr
- ◆ RoHs compliant
- ◆ Incl. Specific Calibration Data and mounting plate
- ◆ **Warranty: 10 years**



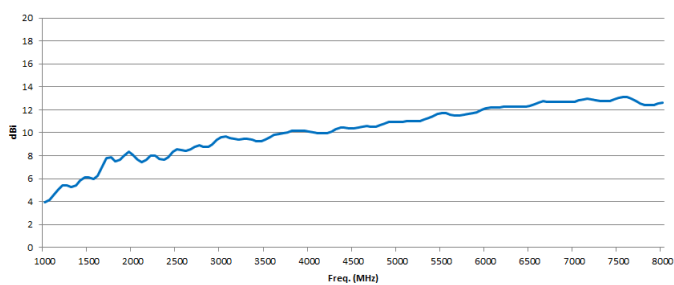
Typ. 1GHz Pattern

## PowerLOG 70180

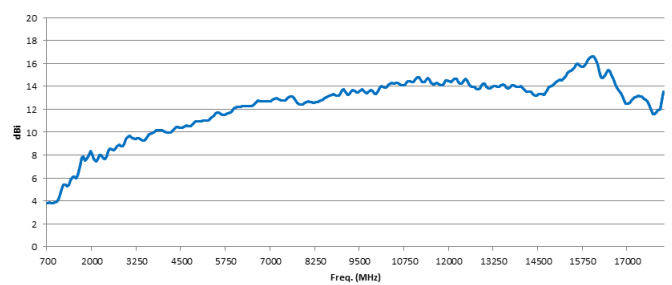
- ◆ Frequency range: **700MHz - 18GHz**
- ◆ Max. Input Power: **500W (peak), 300W (CW)**
- ◆ Gain: **2 to 17dBi**
- ◆ VSWR (typ): < 3:1
- ◆ Design: Double Ridge Horn
- ◆ Nominal impedance: 50 Ohm
- ◆ RF-connector: N (female)
- ◆ Temperature range: - 40°C to +85°C
- ◆ Dimensions (L/W/D): 235 x 252 x 175 mm
- ◆ Relative Humidity: 0% to 95%
- ◆ Weight: 1400gr
- ◆ RoHs compliant
- ◆ Incl. Specific Calibration Data and mounting plate
- ◆ **Warranty: 10 years**



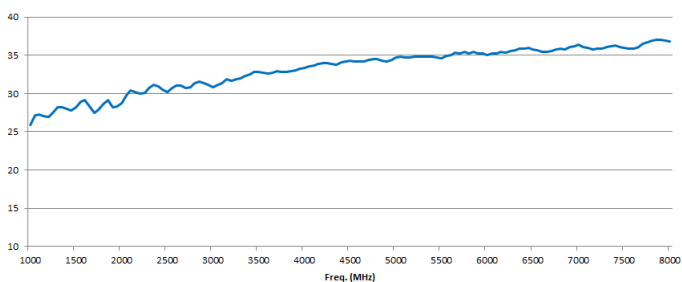
Typ. 3GHz Pattern



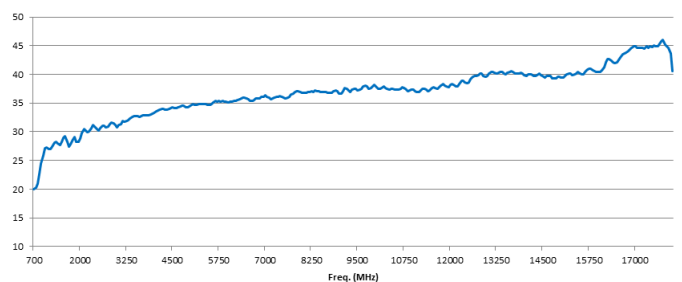
Gain PowerLOG 10800



Gain PowerLOG 70180



Antenna Factor PowerLOG 10800



Antenna Factor PowerLOG 70180

# Recommended accessories for Aaronia PowerLOG

## Heavy Tripod (strongly recommended!)

Highly recommend for the usage of PowerLOG antennas. Quick and easy change of antenna polarization, perfect antenna handling. Robust and sturdy. Incl. transport bag.

Order/Art.-No.: 284



## SMA to N Adapter

This special high quality adapter allows operation of all PowerLOG®-Antennas with any spectrum-analyzer with SMA connector, e.g. the SPECTRAN series. 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



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

High quality special SMA cable for connecting any PowerLOG®-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)  
(requires SMA to N Adapter for connection to PowerLOG)

Order/Art.-No.: 771 (1m Cable), 772 (5m Cable), 773 (10m Cable)



## 1m / 5m / 10m SMA-Cable with tightening nut

Same as above but incl. extremely practical tightening nut for easy installation of the cable without any additional tool. Guarantees no fumbling anymore!

All versions: SMA plug (male) / SMA plug (male)  
(requires SMA to N Adapter for connection to PowerLOG)

Order/Art.-No.: 771X (1m Cable), 772X (5m Cable), 773X (10m Cable)



# References

## User of Aaronia Antennas and Spectrum Analyzers (Examples)

### Government, Military, aeronautic, astronautic

- ◆ NATO, Belgien
- ◆ Boeing, USA
- ◆ Airbus, Hamburg
- ◆ Bund (Bundeswehr), Leer
- ◆ Bundeswehr (Technische Aufklärung), Hof
- ◆ Lufthansa, Hamburg
- ◆ DLR (Deutsches Zentrum für Luft- und Raumfahrt, Stuttgart)
- ◆ Eurocontrol (Flugüberwachung), Belgien
- ◆ Australian Government Department of Defence, Australien
- ◆ EADS (European Aeronautic Defence & Space Company) GmbH, Ulm
- ◆ Institut für Luft- und Raumfahrtmedizin, Köln
- ◆ Deutscher Wetterdienst, Tauche
- ◆ Polizeipräsidium, Bonn
- ◆ Landesamt für Umweltschutz Sachsen-Anhalt, Halle
- ◆ Zentrale Polizeitechnische Dienste, NRW
- ◆ Bundesamt für Verfassungsschutz, Köln
- ◆ BEV (Bundesamt für Eich- und Vermessungswesen)

### Research/Development, Science and Universitys

- ◆ Deutsches Forschungszentrum für Künstliche Intelligenz, Kaiserslautern
- ◆ Universität Freiburg
- ◆ Indonesien Institute of Science, Indonesien
- ◆ Max-Planck-Institut für Polymerforschung, Mainz
- ◆ Los Alamos National Laboratory, USA
- ◆ University of Bahrain, Bahrain
- ◆ University of Florida, USA
- ◆ Universität Erlangen, Erlangen
- ◆ Universität Hannover, Hannover
- ◆ University of Newcastle, Großbritannien
- ◆ Universität Strasbourg, Frankreich
- ◆ Universität Frankfurt, Frankfurt
- ◆ Uni München – Fakultät für Physik, Garching
- ◆ Technische Universität Hamburg, Hamburg
- ◆ Max-Planck Institut für Radioastronomie, Bad Münstereifel
- ◆ Max-Planck-Institut für Quantenoptik, Garching
- ◆ Max-Planck-Institut für Kernphysik, Heidelberg
- ◆ Max-Planck-Institut für Eisenforschung, Düsseldorf
- ◆ Forschungszentrum Karlsruhe, Karlsruhe

### Industry

- ◆ Shell Oil Company, USA
- ◆ ATI, USA
- ◆ Fedex, USA
- ◆ Walt Disney, Kalifornien, USA
- ◆ Agilent Technologies Co. Ltd., China
- ◆ Motorola, Brasilien
- ◆ IBM, Schweiz
- ◆ Audi AG, Neckarsulm
- ◆ BMW, München
- ◆ Daimler AG, Bremen
- ◆ BASF, Ludwigshafen
- ◆ Deutsche Bahn, Berlin
- ◆ Deutsche Telekom, Weiden
- ◆ Siemens AG, Erlangen
- ◆ Rohde & Schwarz, München
- ◆ Infineon, Österreich
- ◆ Philips Technologie GmbH, Aachen
- ◆ ThyssenKrupp, Stuttgart
- ◆ EnBW, Stuttgart
- ◆ RTL Television, Köln
- ◆ Pro Sieben – SAT 1, Unterföhring
- ◆ Channel 6, Großbritannien
- ◆ WDR, Köln
- ◆ NDR, Hamburg
- ◆ SWR, Baden-Baden
- ◆ Bayerischer Rundfunk, München
- ◆ Carl-Zeiss-Jena GmbH, Jena
- ◆ Anritsu GmbH, Düsseldorf
- ◆ Hewlett Packard, Dornach
- ◆ Robert Bosch GmbH, Plochingen
- ◆ Mercedes Benz, Österreich
- ◆ EnBW Kernkraftwerk GmbH, Neckarwestheim
- ◆ AMD, Dresden
- ◆ Infineon Technologies, Regensburg
- ◆ Intel GmbH, Feldkirchen
- ◆ Philips Semiconductors, Nürnberg
- ◆ Hyundai Europe, Rüsselsheim
- ◆ Saarschmiede GmbH, Völklingen
- ◆ Wilkinson Sword, Solingen
- ◆ IBM Deutschland, Stuttgart
- ◆ Vattenfall, Berlin
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