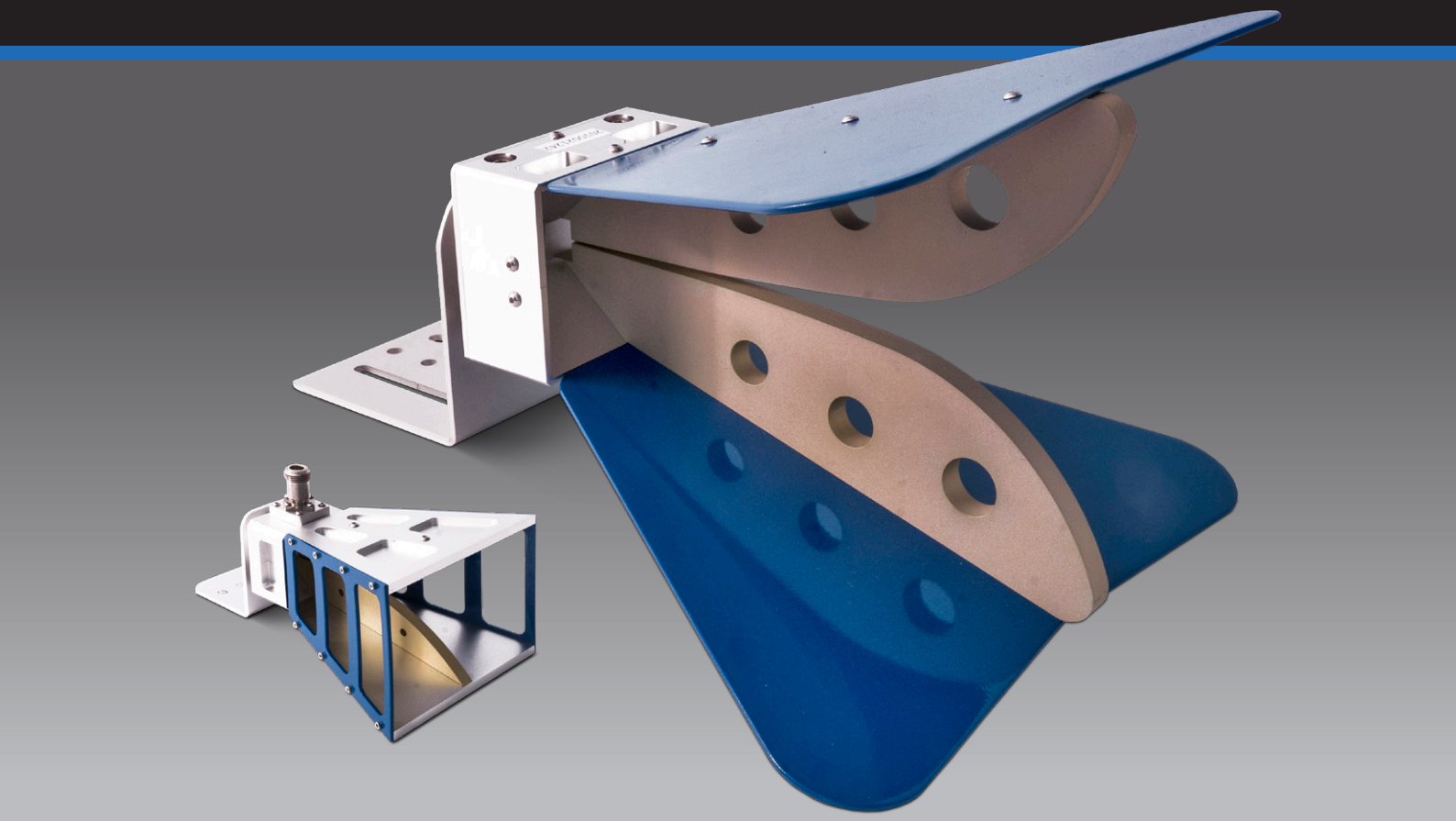
HIGH-POWER HORN ANTENNAS

POWERLOG®

SERIES

High gain and maximum power



Highlights:

- Optimal for EMC immunity testing with extremely high field strengths
- Exceptionally high power support
- Small in size and lightweight

AARONIA AG®
WWW.AARONIA.DE

Gewerbegebiet Aaronia AG II, DE-54597 Strickscheid
Tel.: +49(0)6556-9019-355 Fax: +49(0)6556-93034
www.aaronia.com E-Mail: mail@aaronia.de

MADE IN GERMANY

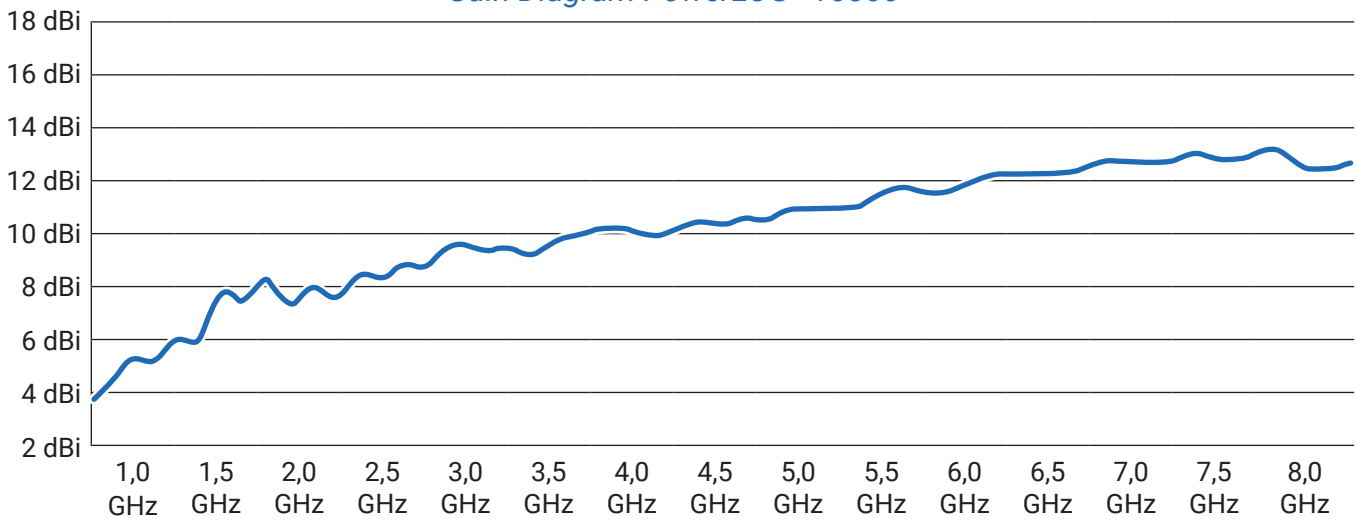
Specifications

PowerLOG® 10800

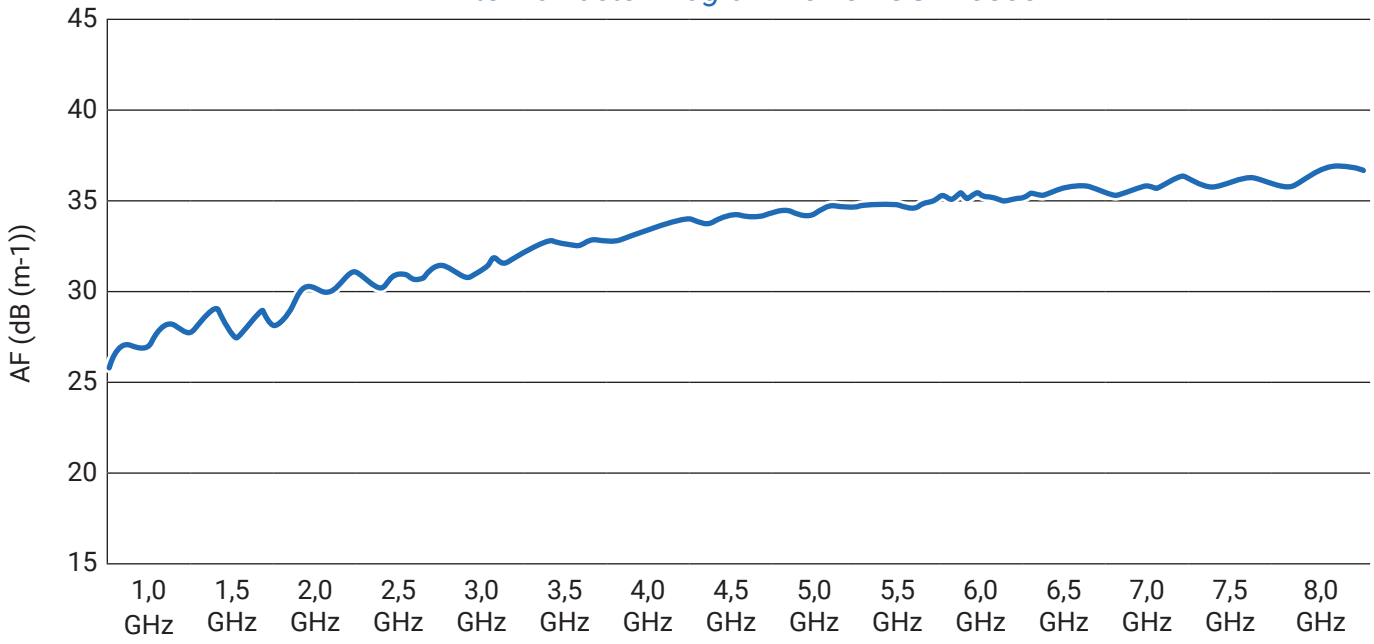
Dimensions [L x W x D]	235 x 252 x 175 mm	**Nominal Impedance**	50 Ohm
Weight	1400 g	**VSWR (typ.)**	< 2,5:1
Design	Dual-ridged horn	**Max. Input Power**	400 W (peak), 200 W (CW)
Gain	4 – 13 dBi	**Temperature Range**	- 40° C – 85° C
RF Connection	N (female)	**Relative Humidity**	0 % – 95 %
Frequency Range	1 GHz – 8 GHz	**Warranty**	2 years

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 10800



Antenna Factor Diagram PowerLOG® 10800



© 2021 || Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany, www.aaronia.com || V5.1

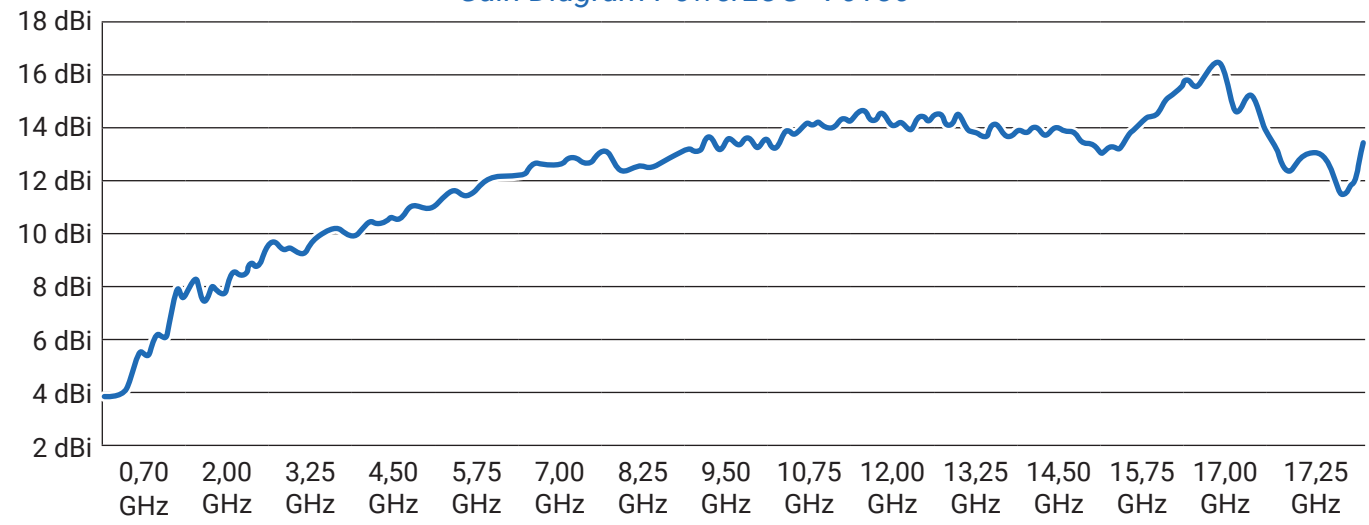
Specifications

PowerLOG® 70180

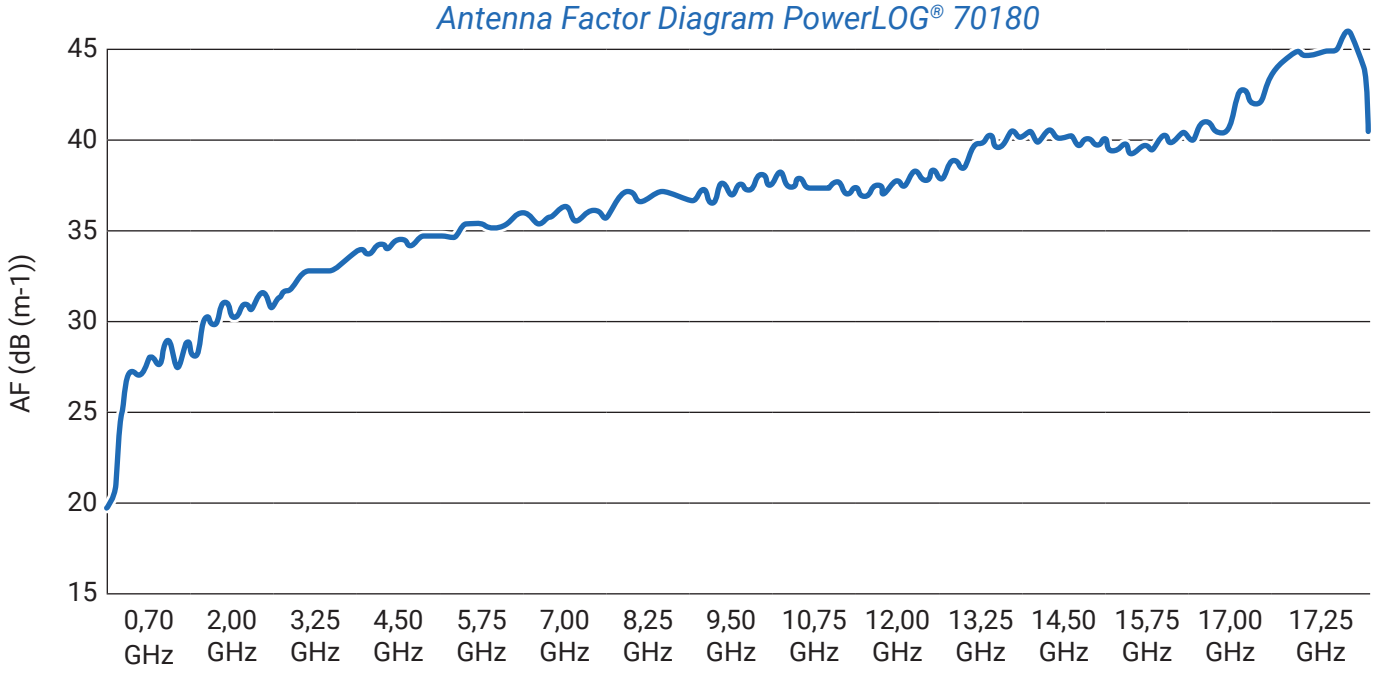
Dimensions [L x W x D]	235 x 252 x 175 mm	**Nominal Impedance**	50 Ohm
Weight	1400 g	**VSWR (typ.)**	< 3:1
Design	Dual-ridged horn	**Max. Input Power**	500 W (peak), 300 W (CW)
Gain	2 – 17 dBi	**Temperature Range**	- 40° C – 85° C
RF Connection	N (female)	**Relative Humidity**	0 % – 95 %
Frequency Range	700 MHz – 18 GHz	**Warranty**	2 years

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 70180



Antenna Factor Diagram PowerLOG® 70180



© 2021 || Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany, www.aaronia.com || V5.1

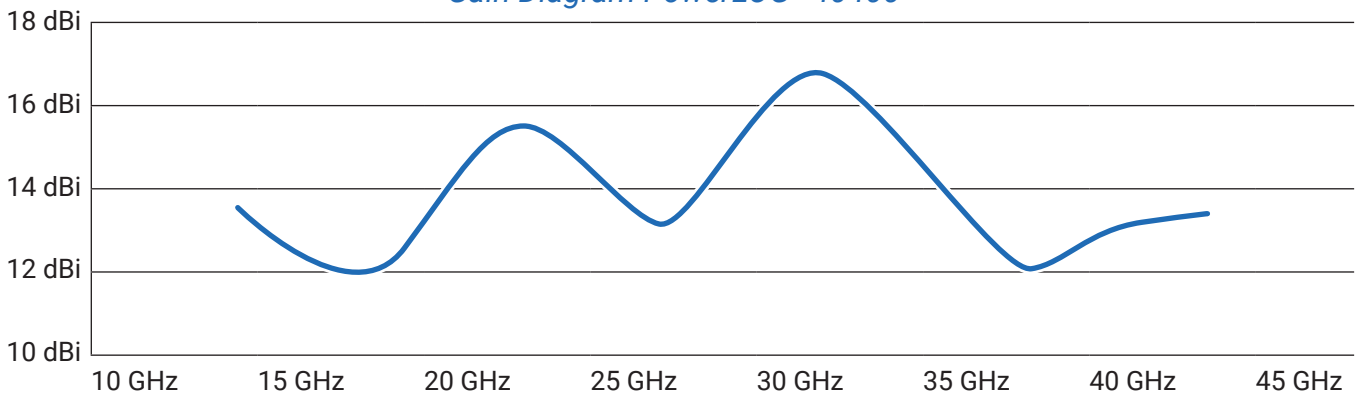
Specifications

PowerLOG® 40400

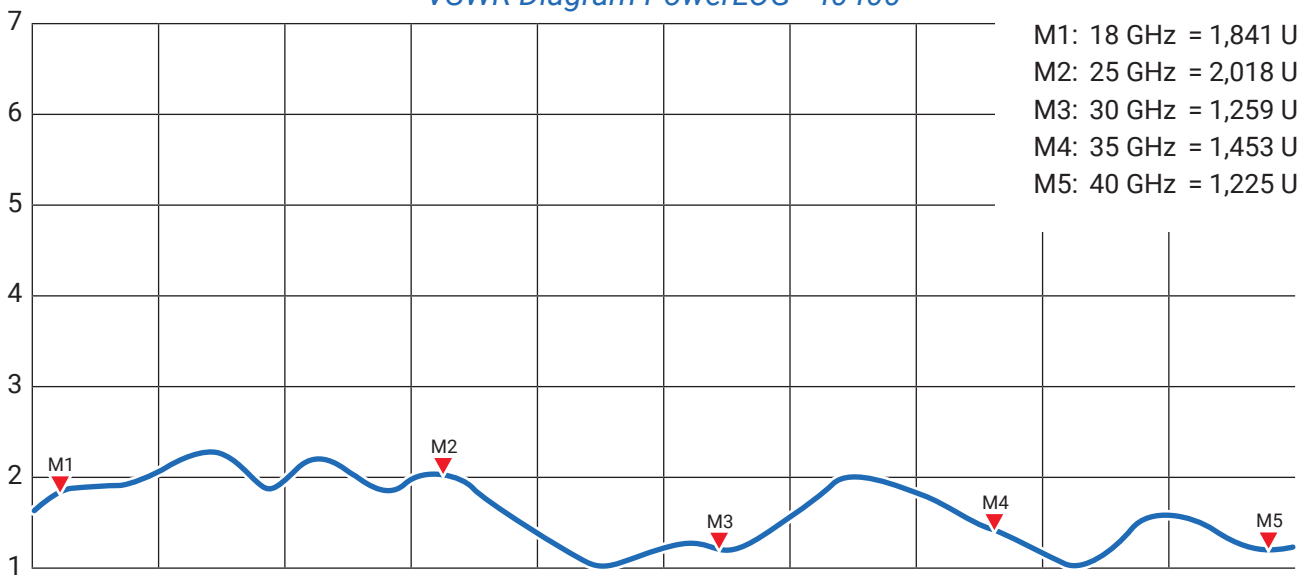
Dimensions [L x W x D]	74 x 55 x 38 mm	**Nominal Impedance**	50 Ohm
Weight	150 g	**VSWR (typ.)**	< 2:1 (within 18 to 40GHz)
Design	Dual-ridged horn	**Max. Input Power**	300 W (peak), 150 W (CW)
Gain	12 – 17 dBi	**Temperature Range**	- 10° C – 60° C
RF Connection	K (2,92 mm), female	**Relative Humidity**	5 % – 80 %
Antenna Factor	24 – 40 dB/m	**Warranty**	2 years
Frequency Range	14 GHz – 40 GHz (specific calibration data from 18 GHz to 40 GHz, usable & directional from up to 4 GHz)	**Beamwidth**	Vertical: 16° Horizontal: 20°

Specific calibration data and mounting plate included

Gain Diagram PowerLOG® 40400



VSWR Diagram PowerLOG® 40400



M1: 18 GHz = 1,841 U
M2: 25 GHz = 2,018 U
M3: 30 GHz = 1,259 U
M4: 35 GHz = 1,453 U
M5: 40 GHz = 1,225 U

© 2021 || Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany, www.aaronia.com || V5.1

Recommended Accessories

Heavy Tripod

(strongly recommended)

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

Order/Art.-No.: 284

1 m / 5 m / 10 m SMA Cable with Locking Nut

Same as above, but with an extremely practical locking nut for easy installation with no additional tools. All versions available as: SMA plug (male) / SMA plug (male) (requires SMA to N Adapter for connection to PowerLOG).

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

1 m / 5 m / 10 m SMA Cable

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

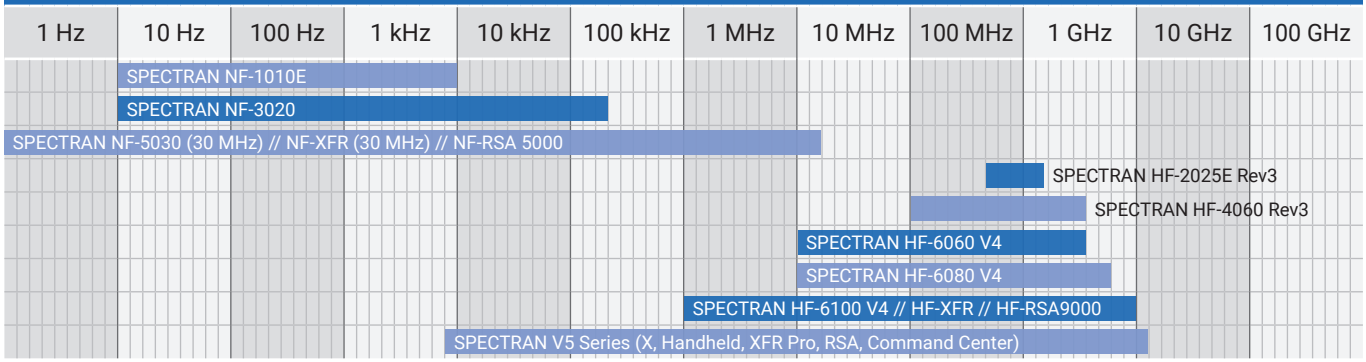
SMA to N Adapter

This special high-quality adapter allows for operating all PowerLOG® 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).

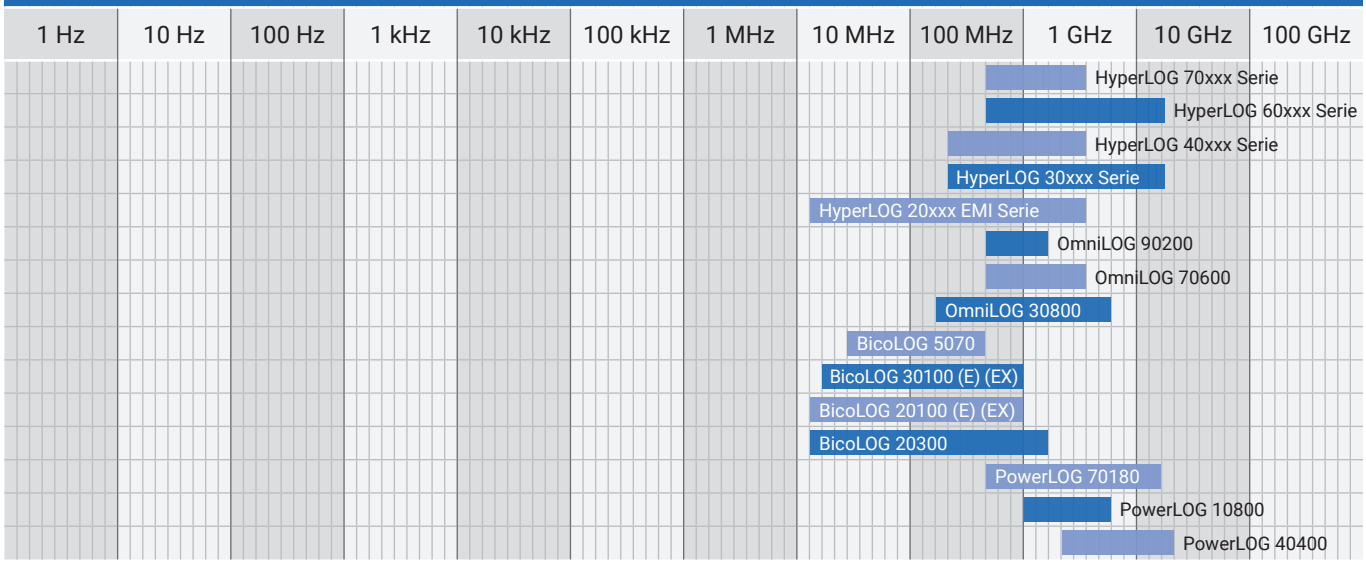
Order/Art.-No.: 770

Frequency Overviews

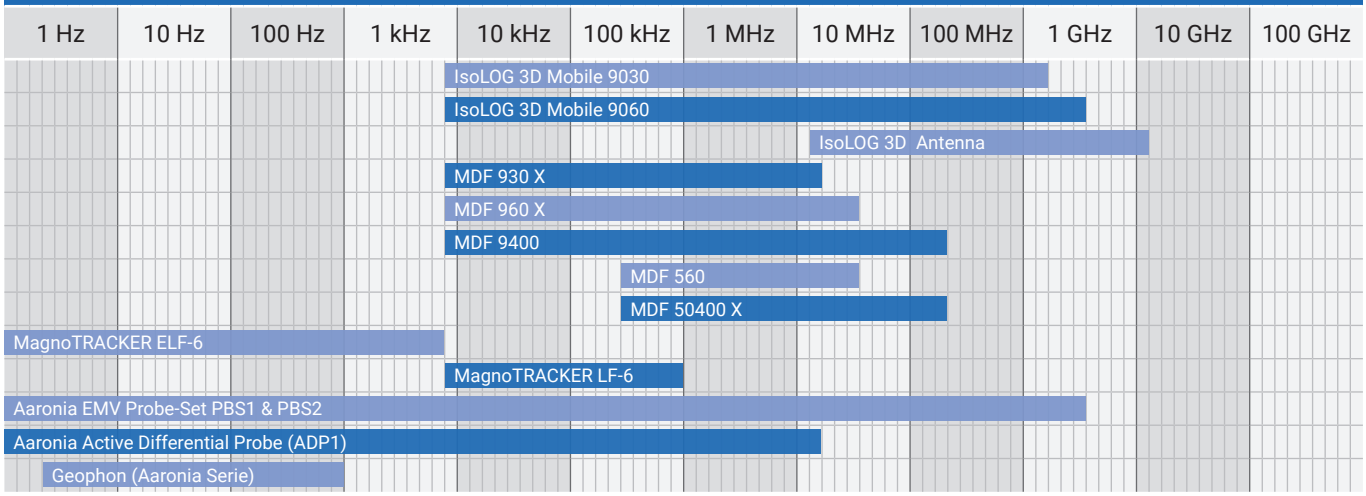
Frequency Overview SPECTRAN® Spectrum Analyzers



Frequency Overview HyperLOG®, BicoLOG® and PowerLOG® Antennas



Frequency Overview IsoLOG® 3D, MDF, MagnoTRACKER® and Probes



© 2021 || Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany, www.aaronia.com || V5.1

REFERENCES

Selected Aaronia Clients

AARONIA AG
WWW.AARONIA.DE

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 Sience (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

MADE IN GERMANY

Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany
Phone: +49(0)6556-900310 | Fax: +49(0)6556-900319
Email: mail@aaronia.de | URL: www.aaronia.com

05.05.2021, Version 5.1