

LPDA HYBRID ANTENNAS

# HYPERLOG<sup>®</sup>

PRO SERIES

High performance broadband measurement and DF antenna from 2 GHz to 40 GHz



- ✓ Extremely broadband
- ✓ High gain and high directivity

- ✓ Excellent forward/backward ratio
- ✓ Compact and robust design

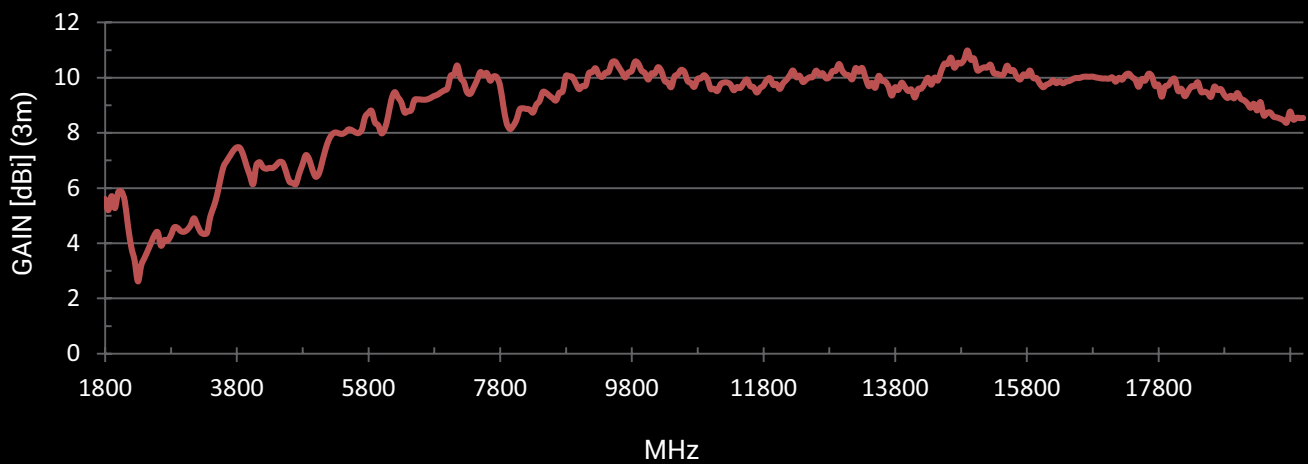


# Specifications

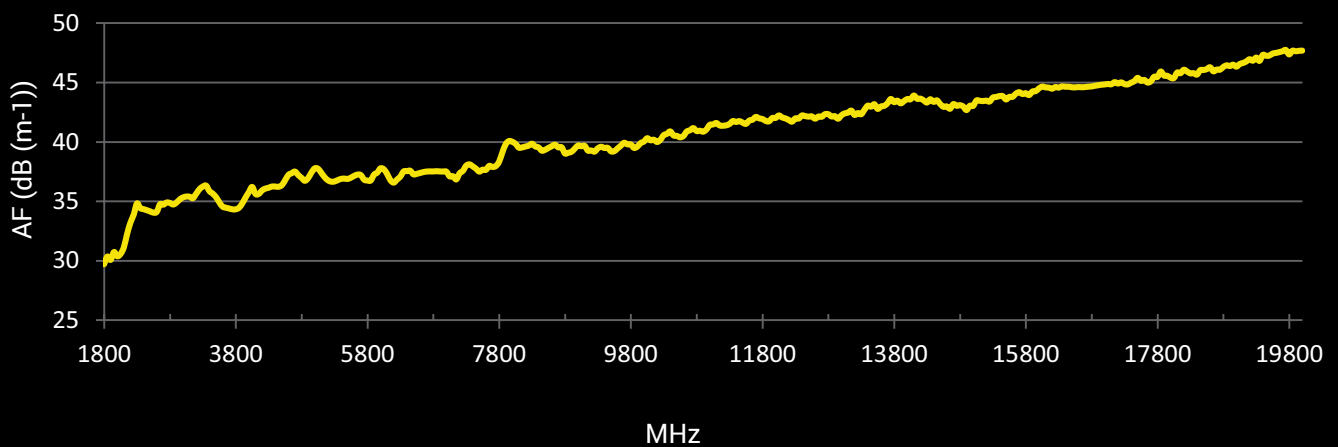
## HyperLOG® PRO 18200

Dimensions [L x W x D]	340 x 200 x 25 mm	Nominal Impedance	50 Ohm
Weight	250 g	Calibration Points	365 (50 MHz steps)
Design	LPDA Hybrid	VSWR (typ.)	< 2:1
Gain (typ.)	11 dBi	Max. Transmission Power	100 W CW (15 GHz)
RF Connection	2.92 mm K (f)	Antenna Factor	29 – 47 dB/m
Frequency Range	2 GHz – 20 GHz	HPBW	min. 26°

Gain Diagram HyperLOG® PRO 18200



Antenna Factor Diagram HyperLOG® PRO 18200

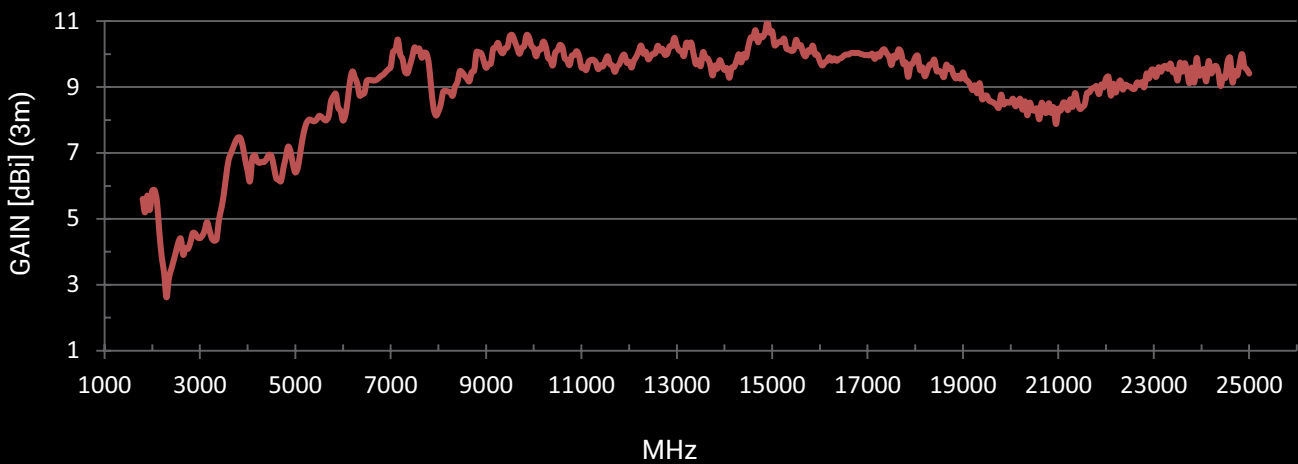


# Specifications

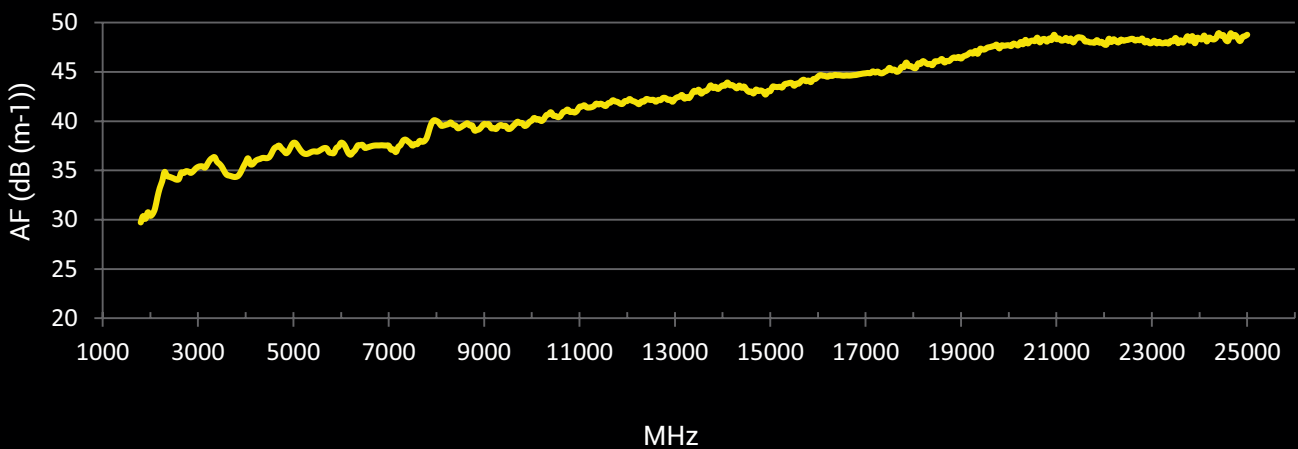
## HyperLOG® PRO 18250

Dimensions [L x W x D]	340 x 200 x 25 mm	Nominal Impedance	50 Ohm
Weight	250 g	Calibration Points	465 (50 MHz steps)
Design	LPDA Hybrid	VSWR (typ.)	< 2:1
Gain (typ.)	11 dBi	Max. Transmission Power	100 W CW (15 GHz)
RF Connection	2.92 mm K (f)	Antenna Factor	29 – 48 dB/m
Frequency Range	2 GHz – 25 GHz	HPBW	min. 26°

Gain Diagram HyperLOG® PRO 18250



Antenna Factor Diagram HyperLOG® PRO 18250

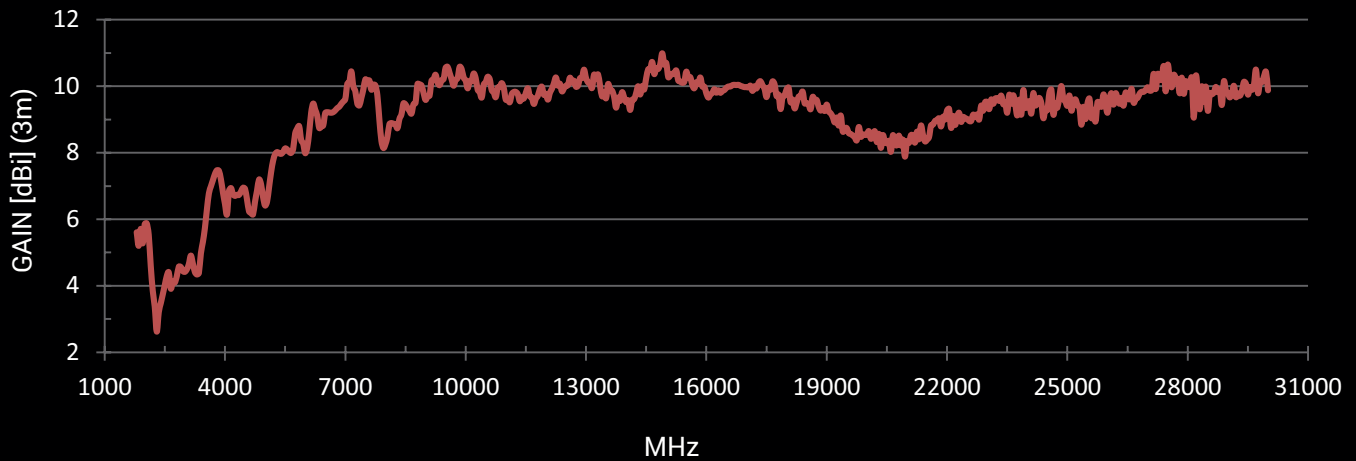


# Specifications

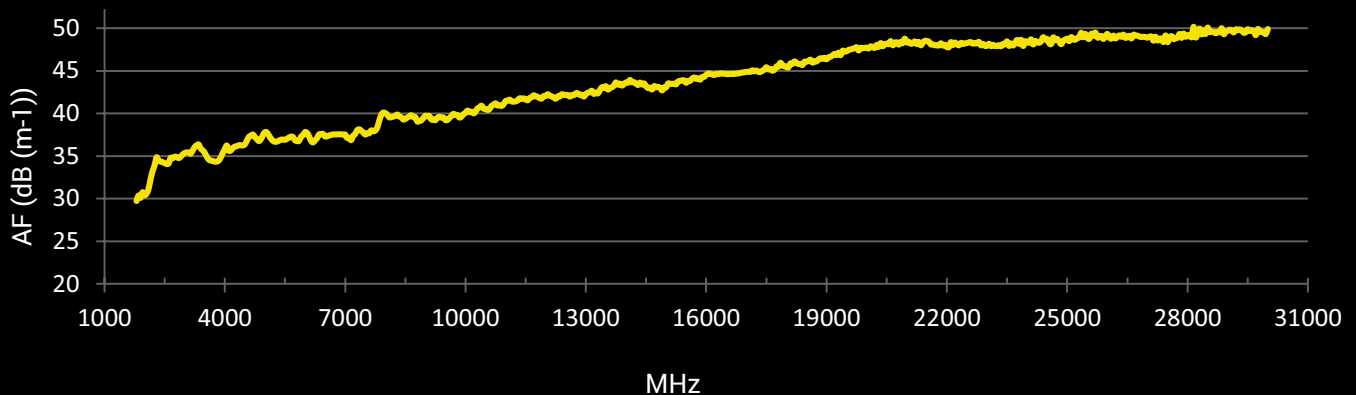
## HyperLOG® PRO 18300

Dimensions [L x W x D]	340 x 200 x 25 mm	Nominal Impedance	50 Ohm
Weight	250 g	Calibration Points	565 (50 MHz steps)
Design	LPDA Hybrid	VSWR (typ.)	< 2:1
Gain (typ.)	11 dBi	Max. Transmission Power	100 W CW (15 GHz)
RF Connection	2.92 mm K (f)	Antenna Factor	29 – 50 dB/m
Frequency Range	2 GHz – 30 GHz	HPBW	min. 26°

Gain Diagram HyperLOG® PRO 18300



Antenna Factor Diagram HyperLOG® PRO 18300

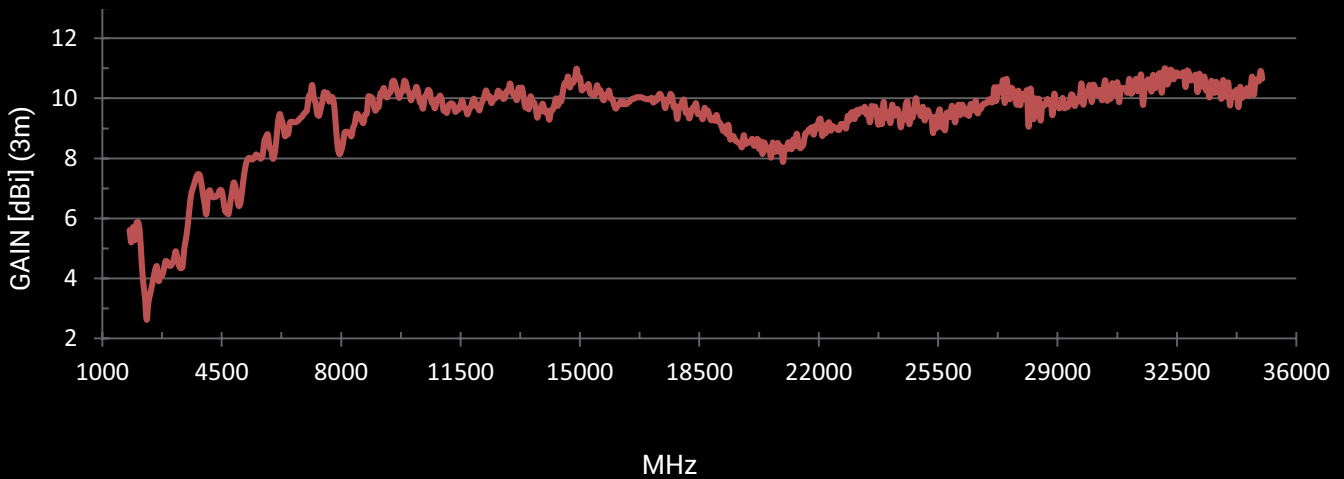


# Specifications

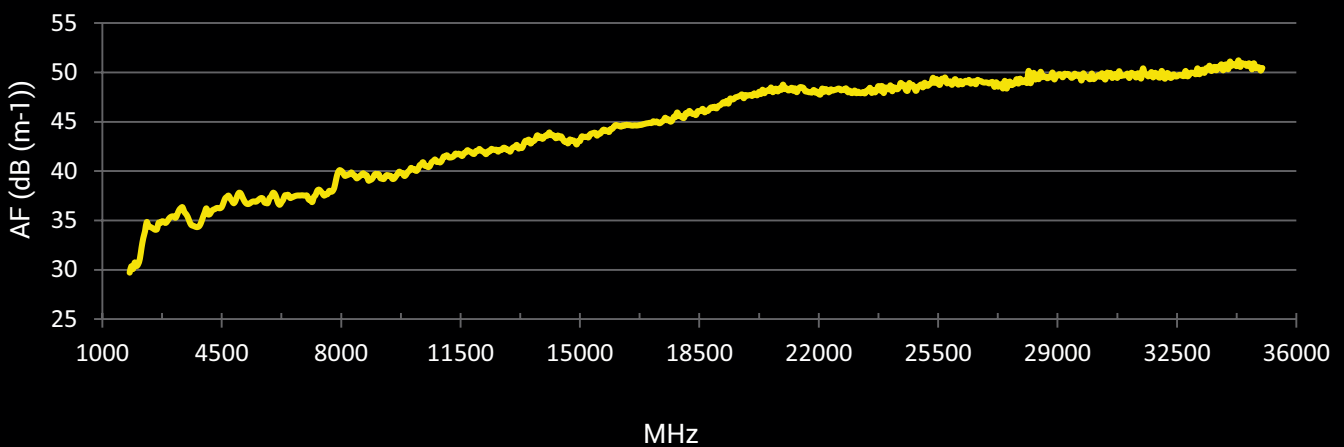
## HyperLOG® PRO 18350

Dimensions [L x W x D]	340 x 200 x 25 mm	Nominal Impedance	50 Ohm
Weight	250 g	Calibration Points	665 (50 MHz steps)
Design	LPDA Hybrid	VSWR (typ.)	< 2:1
Gain (typ.)	11 dBi	Max. Transmission Power	100 W CW (15 GHz)
RF Connection	2.92 mm K (f)	Antenna Factor	29 – 54 dB/m
Frequency Range	2 GHz – 35 GHz	HPBW	min. 26°

Gain Diagram HyperLOG® PRO 18350



Antenna Factor Diagram HyperLOG® PRO 18350

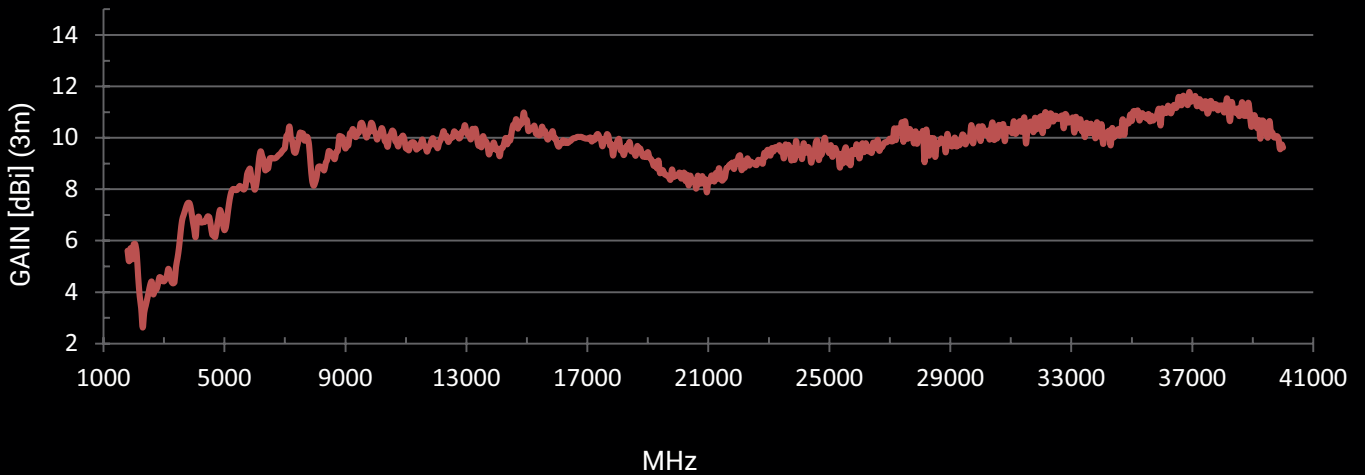


# Specifications

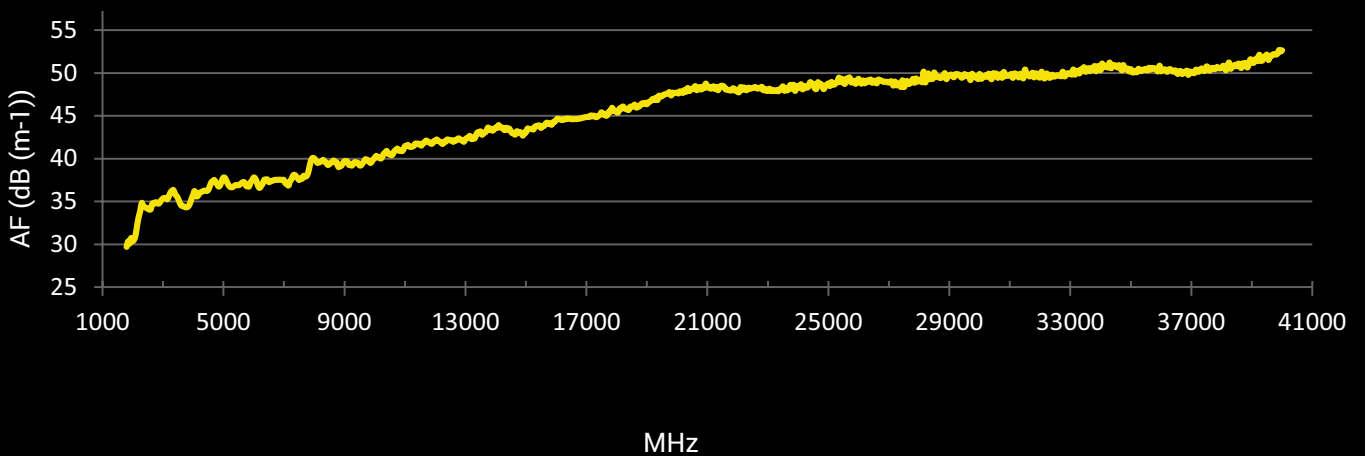
## HyperLOG® PRO 18400

Dimensions [L x W x D]	340 x 200 x 25 mm	Nominal Impedance	50 Ohm
Weight	250 g	Calibration Points	765 (50 MHz steps)
Design	LPDA Hybrid	VSWR (typ.)	< 2:1
Gain (typ.)	12 dBi	Max. Transmission Power	100 W CW (15 GHz)
RF Connection	2.92 mm K (f)	Antenna Factor	29 – 53 dB/m
Frequency Range	2 GHz – 40 GHz	HPBW	min. 25°

Gain Diagram HyperLOG® PRO 18400

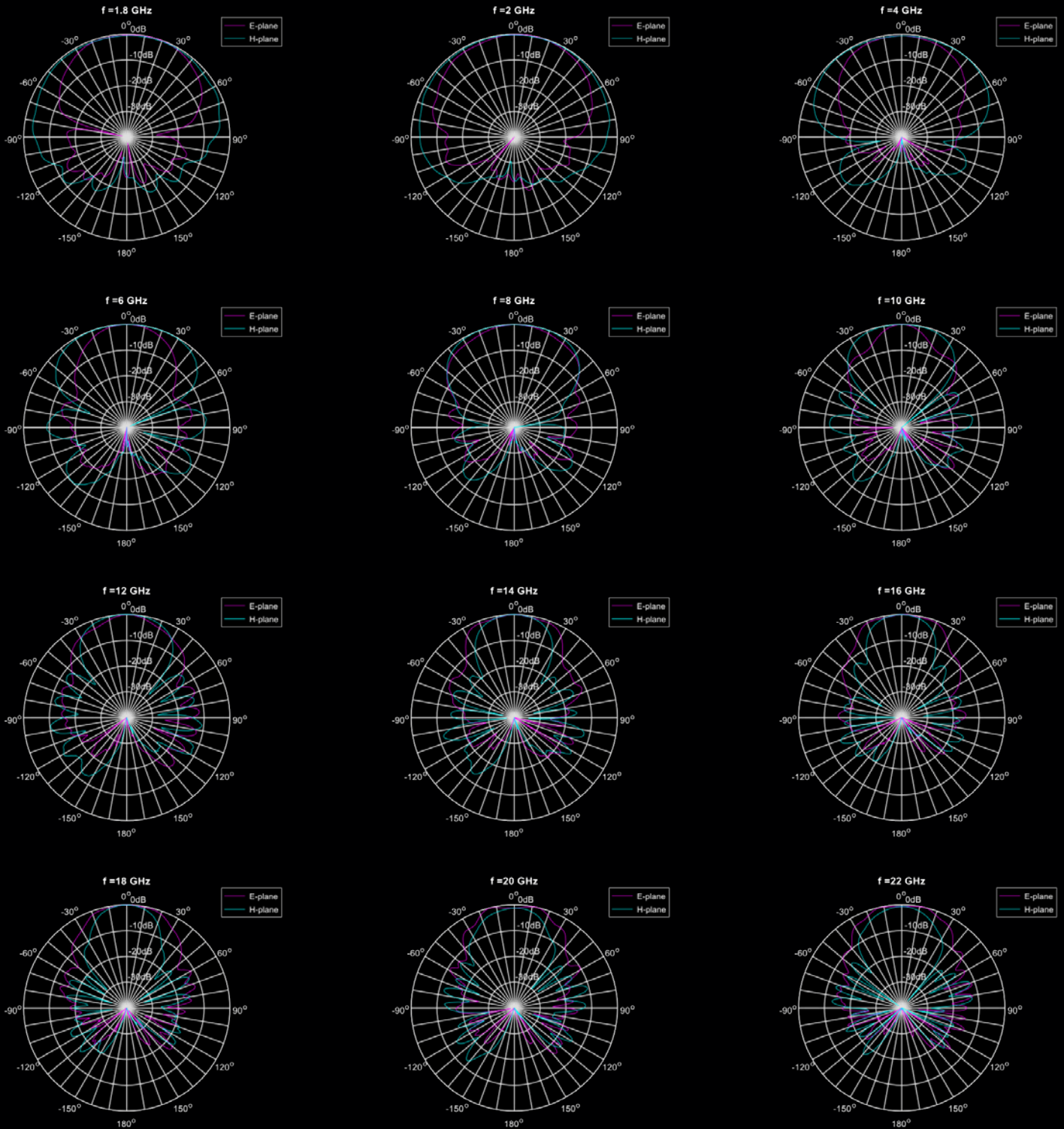


Antenna Factor Diagram HyperLOG® PRO 18400



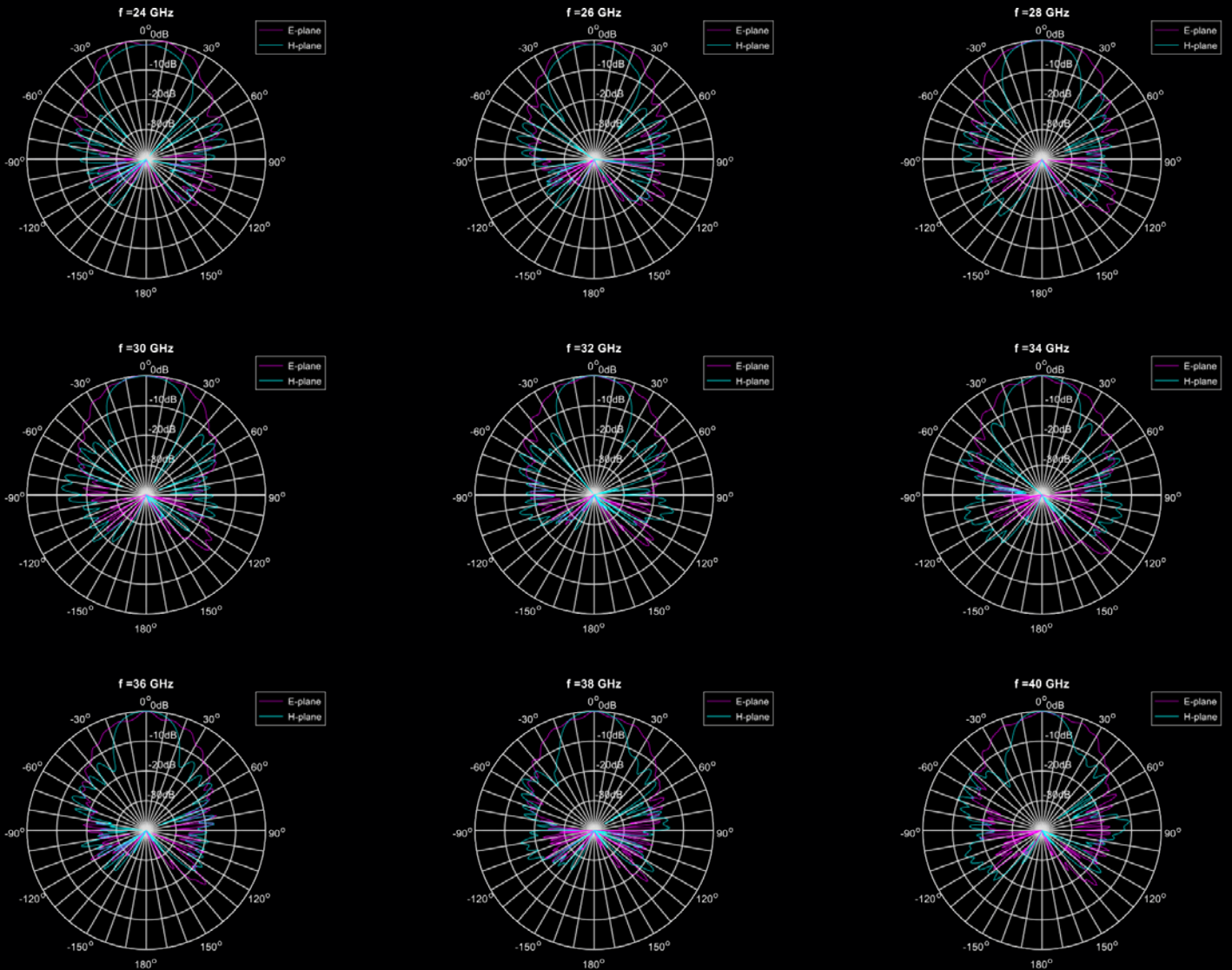
# Pattern

## Measured normalized radiation patterns (1.8 - 22 GHz)



# Pattern

## Measured normalized radiation patterns (24 - 40 GHz)





# Recommended Accessories

## Aluminum Tripod

Height adjustable, high stability. Recommended for use with HyperLOG® antennas.

Max. height: 105 cm.

Order/Art.-No.: 503/011



## Multifunctional Pistol Grip

(strongly recommended)

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

Order/Art.-No.: 503/012

## 2 m K-Kable

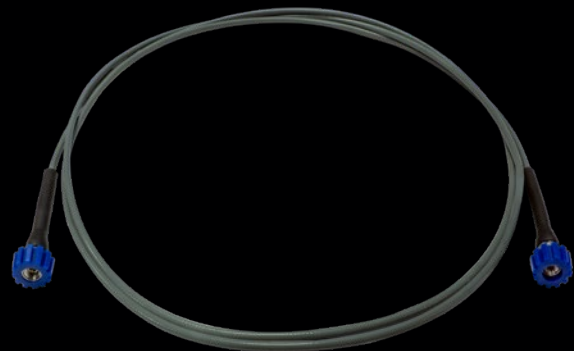
Low loss phase stable high frequency cable 2m with screw aid.

2.92 K(m) - 2.92 K(m)

Frequency range: 10 MHz - 40 GHz

Diameter: 3.6 mm

Order/Art.-No.: 501/056



## GPS Logger

High end GPS logger including antenna position, speed and altitude information. 3D compass, acceleration and tilt sensor, altimeter and pressure sensor.

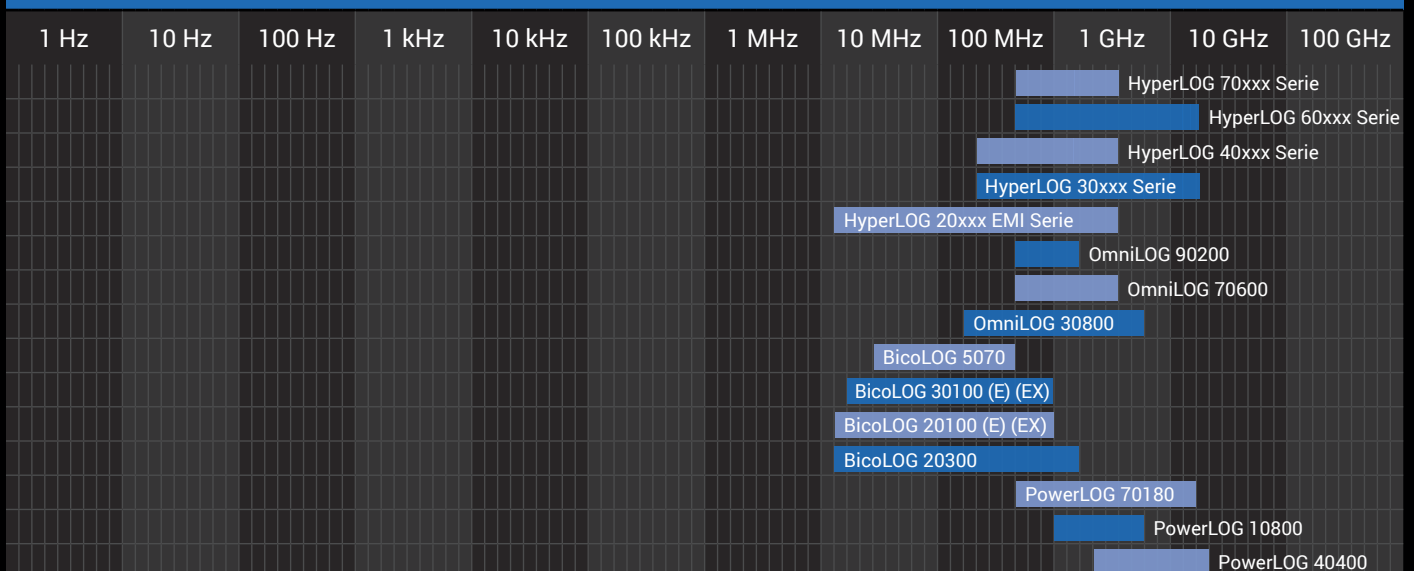
Order/Art.-No.: 503/035

# Frequency Overviews

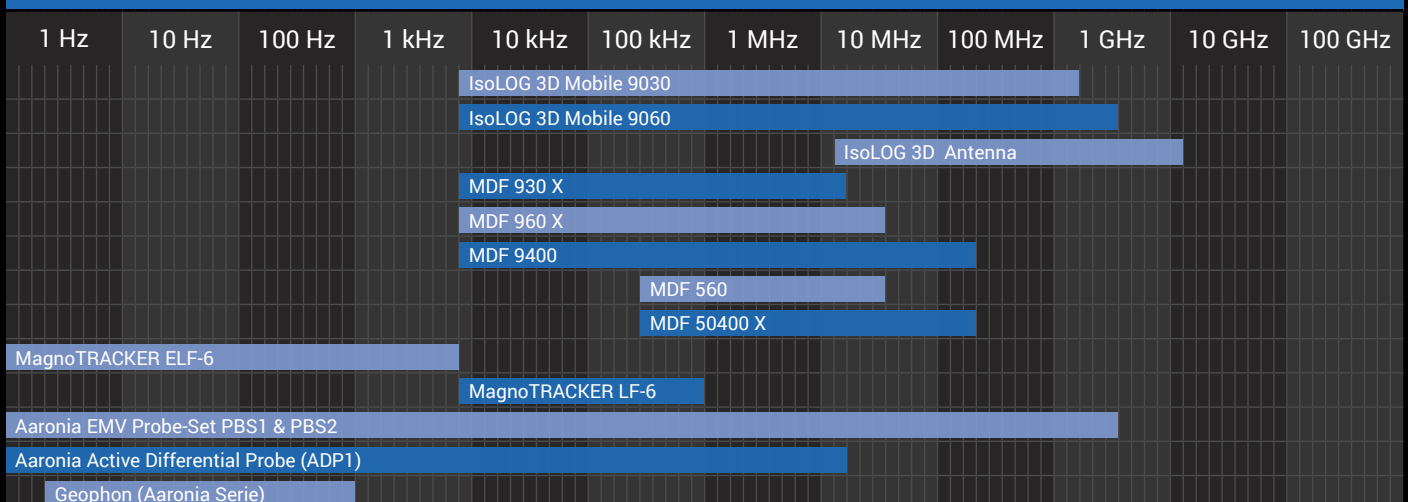
## Frequency Overview SPECTRAN® Spectrum Analyzers



## Frequency Overview HyperLOG®, BicoLOG® and PowerLOG® Antennas



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



# References



## Selected Aaronia Clients

### Government, Military, Aeronautic, Astronautic

- NATO, Belgium
- Department of Defense, USA
- Department of Defense, Australia
- Airbus, Germany
- Boeing, USA
- Bundeswehr, Germany
- NASA, USA
- Lockheed Martin, USA
- Lufthansa, Germany
- DLR, Germany
- Eurocontrol, Belgium
- EADS, Germany
- DEA, USA
- FBI, USA
- BKA, Germany
- Federal Police, Germany
- Ministry of Defense, Netherlands

### Research/Development, Science and Universities

- MIT – Physics Department, USA
- California State University, USA
- Indonesian Institute of Sciences, Indonesia
- Los Alamos National Laboratory, 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 Athens, 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, Germany
- CNN, USA
- Duracell, USA
- German Telekom, Germany
- Bank of Canada, Canada
- NBC News, USA
- Sony, Germany
- Anritsu, Germany
- Hewlett Packard, Germany
- Robert 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

