

## Product Datasheet - Technical Specifications



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# WORLD'S FIRST 3D ANTENNA

# ISOLOG 3D MOBILE PRO

**NEW!**  
9 KHz to 8 GHz

All-in-one antenna – No more swapping



## Highlights:

- Compatible with any Spectrum Analyzer
- High gain and low noise
- Two built-in bypass pre-amplifiers (single or dual)
- Manual or automatic axis switching

  
**AARONIA AG**  
WWW.AARONIA.DE



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# Highlights

- ✓ Compatible with any spectrum analyzer
- ✓ 9 kHz to 8 GHz frequency range
- ✓ High gain and low noise
- ✓ Two built-in bypass pre-amplifiers
- ✓ Manual or automatic axis switching
- ✓ Battery- or DC-powered
- ✓ 6h battery operating time
- ✓ Only 350 g weight
- ✓ Made in Germany



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# 3D RF Testing at its Best



The new IsoLOG 3D Mobile PRO, Aaronia's latest development, is an extremely light and small isotropic antenna compatible with any spectrum analyzer. Ready "on the fly", it offers a suitable plug and play solution for 3D measurements in limited time frames.

The antenna requires no software installation, no power connection and no changes to the hardware. Via the N (male or female) connector, it can be connected with any analyzer or oscilloscope.

The IsoLOG 3D Mobile PRO is available in three different versions:

- ▶ 9 kHz - 3 GHz (IsoLOG 3D Mobile 9030 PRO)
- ▶ 9 kHz - 6 GHz (IsoLOG 3D Mobile 9060 PRO)
- ▶ 9 kHz - **8 GHz** (IsoLOG 3D Mobile 9080 PRO)



## Hardware

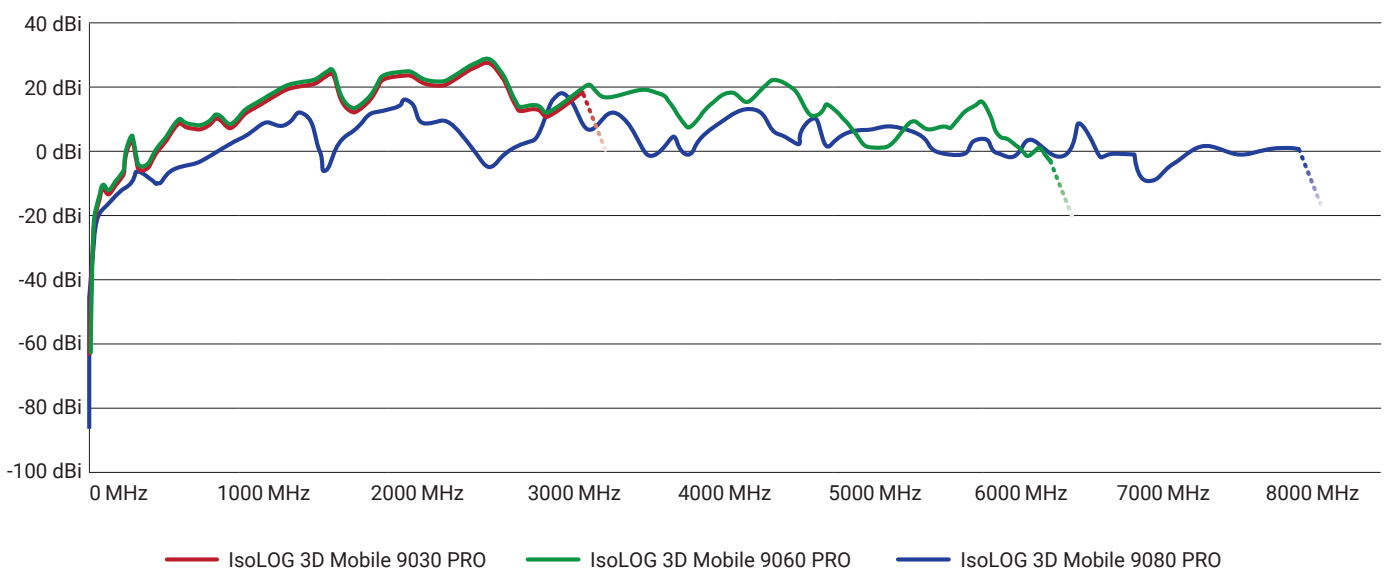
Each IsoLOG 3D Mobile PRO includes an internal, rechargeable battery (offering an operating time of approx. 6 hours), and switchable low-noise bypass single or dual pre-amplifiers (+15dB each (@2GHz)).

The two integrated amps allow the measuring of even extremely weak signals. Thus, used in bypass mode, the antenna is still usable amidst high field strengths. The antenna is controlled either via USB, or a manual antenna selection mode which requires no USB connection. The IsoLOG 3D Mobile PRO also features a built-in, ultra-fast and adjustable "chopper" function: Using special, glitch-free RF switches, this feature offers an automatic endless antenna rotation / selection with a switching duration of up to 50 kHz. This transforms the IsoLOG 3D Mobile PRO into a fully functional 3D antenna without the need for any USB software control.

# Technical Data

Technical Specifications			
Design	Isotropic / 3D, portable		
Frequency Range	9 kHz to 3 GHz (9030 PRO)	9 kHz to 6 GHz (9060 PRO)	9 kHz to 8 GHz (9080 PRO) <b>NEW!</b>
Preamp Stages	2 (+15dB each (@2GHz))		
Chop / Switch Speed Rate	1 Hz to 50 kHz		
Nominal Impedance	50 Ohm		
RF Connection	N-female, optional free of charge orderable as N-male (SMA or BNC via adapter)		
Dimensions	315 x 70 x 70 mm		
Weight	350 g		
Tripod Connection	1/4"		
Battery	650 mAh LiPo		
Interface	USB 2.0		
Operating Temperature	-10° to +50°C		
Storage Temperature	-20° to +60°C		
Country of Origin	Germany		
Warranty	2 years		

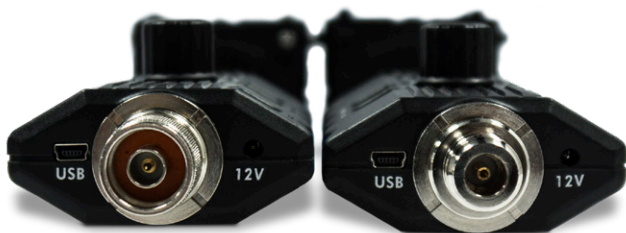
Gain Diagram IsoLOG® Mobile Antennas



# Functions and Accessories

Lightweight (only 350 g) and handy, the IsoLOG 3D Mobile PRO is the ultimate portable measuring solution. The layout and functions are as follows:

1. Tri-Axis Sensor Head
2. LED Indicator Lights
3. Axis Change / Chop Mode
4. Manual / USB Control
5. Pre-Amp On / Bypass
6. Internal Sensor Change
7. Manual Chop Rate Selection
8. Antenna On / Off
9. 12 V Power Supply Connector
10. USB Connector
11. RF Connector (N Female or N Male)



RF Connectors N Male and N Female

## Included in Delivery

Shipped in a waterproof transport case, the scope of delivery leaves nothing to be desired:

- IsoLOG 3D Mobile PRO antenna with built-in rechargeable battery
- Battery charger / power supply
- Water and shock proof transport case
- Pistol grip with miniature tripod function
- SMA to N Adapter for the connection of SMA cables



# REFERENCES



## Selected List of Aaronia Clients

### Government, Military, Aero- and 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 Science (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
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- **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
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- **CNN**, USA
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