

# PRODUCT PORTFOLIO 2024

Spectrum Analyzers | Measurement Antennas | Drone Detection | Shielding Materials



### Introduction







### The company

Aaronia AG is a manufacturer of test- and mea- analyzers and antennas. Aaronia's main comfor its highly innovative products and solutions, date hardware and software tools. especially our selection of unique spectrum

surement equipment, headquartered in Germa- petence consists of high-frequency and microny. Founded in 2003 by the CEO Mr. Thorsten wave know-how, developed over many years by many, which allows the company to guarantee In 2008, Aaronia announced the fourth gener-Chmielus, the company is known worldwide highly specialized engineers, providing up-to-

### German engineering

individually manufactured and calibrated in Ger- 2004. highest quality standards.

spectrum analyzers - the true handheld spec- lyzer offering a sensitivity of -170dBm/Hz.

Aaronia AG products are designed, developed, trum analyzer. The first unit was shipped in

ation of the SPECTRAN<sup>®</sup> Spectrum Analyzers, Aaronia invented and defined a new class of the V4 series, first and still only handheld ana-

worldwide.

### Introduction







### Always on the edge of innovation Industry leading software

oped a complete Drone Detection and Counter TRAN<sup>®</sup> V6 series, spectrum analyzers with a yond its competitors is the flexibility and usabil- products. Some applications include spectrum Measure System in 2013 as one of the first on range from 9 kHz to up to 110GHz and a re- ity of our software. the market. The AARTOS<sup>M</sup> Drone Detection Sys- al-time bandwidth of up to 3 THz! Its full band- The RTSA-Suite Pro is a highly modular pro- signal localization, remote control of Aaronia tem is currently installed more than 100 times width True IQ-streaming via USB makes the V6 gram, renown for having some of the best ways devices and more! series unique in the market.

to display RF information as graphical data.

Pushing the invention further, Aaronia devel- Aaronia's latest big development is the SPEC- One of the key areas Aaronia keeps pushing be- It can be used with a large array of Aaronia analysis, drone detection, signal demodulation,

### Introduction





### Spectrum analyzers

Aaronia spectrum analyzers enable RF and ble with Aaronia measuring instruments. signal strength, measuring and evaluating even standards! the most complex limits - all this is easily possi-

EMC measurements in real time and at a spec- All SPECTRAN® series instruments are develtacular price. Finding sources of interference oped, manufactured and calibrated by Aaronia With the antennas developed and manufac- very high EMC protection. For magnetic field and their causes, determining frequency and in Germany. This guarantees the highest quality

### Antennas and shielding

Aaronia AG specializes in the development and Aaronia-Shield<sup>®</sup> and the high-tech EMC shieldnarios can thus be served.

The highly transparent EMC shielding material netic fields.

construction of quality antennas of all types. ing fleece Aaronia X-Dream<sup>®</sup>, for example, offer tured in Germany, almost all measurement sce- shielding, our MagnoShield® series offers unparalleled protection against alternating mag-





# 2003

FOUNDING Aaronia AG is founded by Thorsten Chmielus in Lünebach, Germany.

# 2013

AARTOS DDS In 2013, Aaronia developed the world's first drone detection system of its kind, AARTOS™.

**NEW PRODUCTS** Aaronia AG massively extends the range of SPEC-TRAN® V6 Spectrum Analyzers with the introduction of the ECO, 5G and XPLORER versions.

#### HANDHELD

In 2008, Aaronia was the first company to launch a handheld portable spectrum analyzer. Its sensitivity of -170 dBm DANL set a new world record.

# 2019

#### **GENERATION 6**

In 2019, Aaronia AG launched the 6th generation of the AARTOS™ system. Combining the new SPECTRAN<sup>®</sup> V6 Spectrum Analyzer with the Iso-LOG<sup>®</sup> 3D direction finding antenna, it is able to locate both the position and altitude of incoming drones - another industry first!

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\* \* \* <sup>®</sup> AARONIA AG



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#### Sweep spectrum analyzers

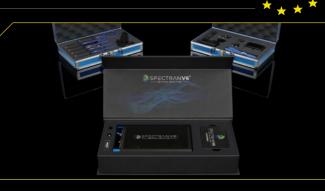
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SPECTRAN <sup>®</sup> HF-60100 V4   Handheld
SPECTRAN® NF-5030   Handheld
SPECTRAN® NF-5030 S   Handheld



#### Solutions and bundles

Real-time EMC bundles	34-35
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#### Additional components

Directional Coupler   Desktop USB
Splitter / Combiner   Desktop USB
Active Splitter / Combiner   Desktop USB
RF over Fiber   Desktop USB
USB Powerbank   Desktop USB



### Signal generators

SPECTRAN®	V6 ECO VSG 50   Desktop USB
SPECTRAN®	V6 VSG 120   Desktop USB
SPECTRAN®	V6 VSG 240   Desktop USB

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30 RF-TRACKING-ARRAY			hun hun -	and the second	and and	
ALL DE LAVANNA PARTA						

#### Antennas

EMC Sniffer / Probes	43	3D Isotropical	52-53
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LF Preamplifiers HF Preamplifiers		62 63	AARTOS <sup>™</sup> DDS Overview AARTOS <sup>™</sup> DDS system lineup	64-65 66-67	RTSA-Suite PRO RTSA-Suite PRO additional software blocks	6 69-7

### Real-Time Spectrum Analyzer Overview



Our SPECTRAN® V6 series of real-time 1 THz per second). Its full bandwidth IQ stream- as spectrum monitoring, RF and microwave With a weight of only 850 g, the V6 is perfect for SPECTRAN® V6 can reliably capture even close! the shortest signal transmissions, sweep- With countless capabilities, the SPECTRAN® V6 surements. The V6 is the ideal spectrum ana- RTSA-Suite PRO, transforming it into a fully-feaing 6 GHz in less than 5 milliseconds (over lets you overcome almost any challenge. Such lyzer for taking fast and reliable measurements. tured benchtop spectrum analyzer.

spectrum analyzers are the most compact ing (via USB) makes the V6 series unique on the measurements, interference hunting, EMC test- conducting measurements in the field, while it's and fastest analyzers on the market. The market. With no other analyzer even coming ing, Wi-Fi and wireless network measurements, high-tech features also make it fit for use in the

RF surveillance or counter-surveillance mea- lab. Each V6 includes our PC analysis software

Aaronia AG offers optimised solutions for almost every application. In addition to the compact USB desktop variants, our analyzers are integrated into diverse form factors. Whether it's a handy and powerful tablet, rugged outdoor devices or absolute high-end performance as a server solution - Aaronia AG has the right device for you.

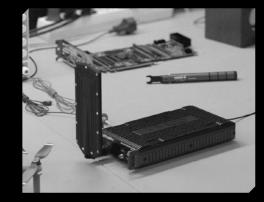


#### SPECTRAN<sup>®</sup>V6 – BEYOND REALTIME ––––– REALTIME SPECTRUM ANALYZER PUUS

10 MHz up to 8 GHz frequency range · Up to 245 MHz real-time bandwidth Up to 1100 GHz/s sweep speed

IQ POI of 15/10 ns

· DANL of -170 dBm/Hz



SPECTRAN'V6 ND REALTIME -REALTIME SPECTRUM ANALYZER FCO

- 9 kHz up to 7.25 GHz frequency range
- · Up to 2x 44 MHz real-time bandwidth
- · Up to 3 THz/s sweep speed
- · 10 POI of 30/20 ns
- · DANL of -170 dBm/Hz



- · 250 MHz to 53 GHz frequency range
- · 60 MHz real-time bandwidth
- · Up to 3 THz/s sweep speed
- · IO POI of 30/20 ns

14/1/14/2

· DANL of -170 dBm/Hz



#### SPECTRAN'V6 BEYOND REALTIME REALTIME SPECTRUM ANALYZER

· 5 GHz to 110 GHz frequency range · 60 MHz real-time bandwidth · Up to 3 THz/s sweep speed · 10 POI of 30/20 ns · DANL of -170 dBm/Hz





# SPECTRAN<sup>®</sup>**V6** Form Factors





**V6**CUSTOMIZED PRECISION MADE SPECTRUM ANALYZERS





In addition to the standard configurations included in this catalog of our form factors, we offer our V6CUSTOMIZED service for all devices. Here you have the option of freely allocating all available SPECTRAN® V6 analyser slots as well as customising the hardware of the unit itself. Try our configurator at configurator.aaronia.com.

















SPECTRAN<sup>®</sup> V6 PLUS 8 GHz USB real-time spectrum analyzer & vector signal generator

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### USB Real-Time Spectrum Analyzers

**V6** OUTDOOR INDOOR STACKABLE PLUS USB POWERED MOBILE



Aaronia's latest generation of with a real-time bandwidth of high performance real-time 80MHz (optionally 120MHz) spectrum analyzers: Even the while the 500XA-6 version entry-level SPECTRAN<sup>®</sup> V6 features an additional vector 250XA-6 model is equipped signal generator. The flagship

with an astonishing real-time requires little space in the labbandwidth of 160MHz (op- oratory and is also ideal for tionally 245MHz) and a mobile applications due to its sweep speed of up to 1100 low power requirements.

model 2000XA-6 is equipped GHz/s. The SPECTRAN® V6

uency Band		Sweep S	Speed	RTBW
/Hz - 6   8 GHz	30   20 ns	300 440	GHz/s	80   120MHz
1 Rx (SMA)		Design	USB Des	sktop
		Weight	850 g	
-165 dBm/ł	Ηz	SKU#	102/001	1

PLUS 500XA-6 PLUS 500XA-6 PLUS 500XA-6 PLUS 500XA-6 PLUS 500XA-6 PLUS 500XA-6			
V6 PLUS 50	-AXOO	-6	
Frequency Band	IQ POI	Sweep Speed	RTBW

POI	Sweep S	Sweep Speed	
20 ns	300   4400	300   440GHz/s	
	Design	USB De	sktop
	Weight	850 g	
	SKU#	102/00	2

V6 PLUS 200 V6 PLUS 200 V6 PLUS 200 V6 PLUS 200			
Frequency Band	IQ POI	Sweep Speed	RTBW
10MHz - 6   8 GHz	15 10 ns	730 1100GHz/s	160 245MHz

riequent	y Danu		Oweeh O	heen	
10MHz-6	6 8 GHz	15 10 ns	730 1100GHz/s		160 245MHz
Rx	2 Rx		Design	USB De	sktop
Гх	1 Tx		Weight	850 g	
DANL	-170 dBm/ł	Hz	SKU#	102/003	3

#### Hardware Options

120 MHz I/Q RTBW	250XA-6/500XA-6 only
245 MHz I/Q RTBW	2000XA-6 only

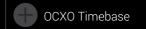


0MHz - 6 | 8 GHz

-168 dBm/Hz

250XA-6 only

Ultra Low Noise Preamp Additional 20 dB of gain



ultra high vibration resistance

Internal GPS spoofing detection/active GPS antenna

DEVELOPED & MANUFACTURED IN GERMANY



**V6** 

ECO









spectrum analyzer & vector signal generator

### USB Real-Time Spectrum Analyzers

OUTDOOR		
INDOOR	STACKABLE	
MOBILE	USB POWERED	

Aaronia presents the SPEC- even the shortest signal TRAN<sup>®</sup> V6 ECO, a real-time, transmissions. high-performance, spectrum Its scanning speed and reanalyzer and monitoring re- cording time are unrivaled. ceiver designed to capture The analyzer scans 6GHz in

2ms (3THz/s), making it the a vector signal output is addworld's fastest USB spec- ed for the 150XA-6 version. trum analyzer. The entry-level The 200XA-6 with 2 Rx and 100XA-6 model features 1 Rx a RTBW of 2x44MHz cominput with a RTBW of 44 MHz, pletes the ECO V6 lineup.



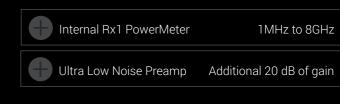
9kHz - 6	s 8 GHz	30   20 ns	- 500GHz		44MHz
<	1 Rx		Design	USB Des	sktop
	1 Tx		Weight	850 g	
ANL	-170 dBm/H	Hz	SKU#	102/036	



x	2 Rx	Design	USB Desktop
x		Weight	850 g
ANL	-170 dBm/Hz	SKU#	102/037

#### Hardware Options

Ultra Fast Tictoc LO	3THz/s sweep speed
Frequency Extention WiFi6E	9kHz - 7.25 GHz





ultra high vibration resistance

Internal GPS spoofing detection/active GPS antenna

DEVELOPED & MANUFACTURED IN GERMANY















SPECTRAN<sup>®</sup> V6 ECO 18 GHz USB real-time spectrum analyzer & vector signal generator

 $\mathbf{G}$ 

### USB Real-Time Spectrum Analyzers

OUTDOOR INDOOR STACKABLE MOBILE USB POWERED

This spectrum analyzer en- Interference hunting, EMC ables you to conquer almost testing or Wi-Fi and wireless any challenge. Whether it's network measurements, the spectrum monitoring, RF and SPECTRAN<sup>®</sup> V6 ECO-18 is microwave measurements, the ideal spectrum analyzer

for making reliable and fast a fully-featured benchtop measurements The included analysis soft- ECO-18 offers a solution for ware, RTSA-Suite PRO, trans- almost every application. forms the V6 ECO-18 into

spectrum analyzer. The V6

1 Rx	Design	USB Desktop
	Weight	850 g
-170 dBm/Hz	SKU#	102/065

#### Hardware Options

Ultra Fast Tictoc LO	3THz/s sweep speed
PowerMeter	Up to 70 GHz

	ununu
ECO 150XA-18 REAL-TIME SPECTRUM ANALYZEP ANA	
V6 ECO 150XA-18	

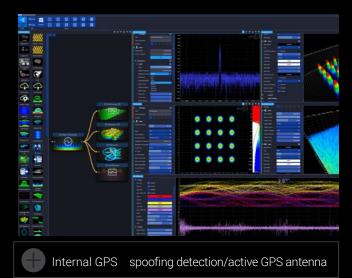
Frequence	y Band	IQ POI	Sweep Speed		RTBW
9kHz - 1	8 GHz	30   20 ns	500GHz/s	3THz/s	60MHz
Rx	1 Rx		Design	USB Des	sktop
Tx	1 Tx		Weight	850 g	
DANL	-170 dBm/	Ήz	SKU#	102/066	



OCXO Timebase ultra high vibration resistance

Ultra Low Noise Preamp Additional 20 dB of gain

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V6

**5G** 







SPECTRAN<sup>®</sup> V6 5G 53 GHz USB real-time spectrum analyzer

DEVELOPED & MANUFACTURED IN GERMANY

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### USB Real-Time Spectrum Analyzers

OUTDOOR INDOOR STACKABLE MOBILE USB POWERED

Aaronia presents the SPEC- shortest signal interference TRAN<sup>®</sup> V6 5G, a real-time or performance degradation. spectrum analyzer specifical- Its price/performance raly designed for monitoring 5G tio as well as the number of networks, detecting even the available additional functions

are unsurpassed. The analyz- Three different versions are er scans 6GHz in less than provided, covering the com-10ms (500 GHz/s), making it plete range of 5G bands. one of the fastest USB spec- Simply choose the one which trum analyzers in the world. fulfills your requirements.

#### V6 5G 200XA-50

Frequence	cy Band	IQ POI	Sweep S	speed	RTB'	Ś
250MHz - 24 - 53		30 20 ns	500GHz/s	3THz/s	60MH	Ηz
Rx	2 Rx		Design	USB Des	ktop	
Tx			Weight	850 g		
DANL	-170 dBm/H	łz	SKU#	102/055		

### V6 5G 100XA-30

uency Band	IQ POI		Sweep	Speed	RTB'
GHz - 30GHz	30   20 ns		500GHz/s	3THz/s	60MH
1 Rx			Design	USB Des	ktop
			Weight	850 g	
-170 dBm/Hz			SKU#	102/053	

#### Hardware Options

) (	Ultra Fast Tictoc LO	3THz/s sweep sp

Internal GPS spoofing detection/active GPS antenna

Ultra Low Noise Preamp Additional 20 dB of gain















SPECTRAN<sup>®</sup> V6 XPLORER 110 GHz USB real-time spectrum analyzer & vector signal generator

# USB Real-Time Spectrum Analyzers

OUTDOOR INDOOR STACKABLE MOBILE USB POWERED



The new SPECTRAN<sup>®</sup> V6 fective development and XPLORER, the first USB spec- validation platform for all trum analyzer for microwave millimeter-wave applications, applications > 100GHz. It is including those with the shortdesigned to provide a cost-ef- est signal transmissions. De-

spite its compact size and microwave range. Whether light weight, its sampling spectrum monitoring, setting speed is virtually unmatched. up radio relay links, testing With this, you can master automotive distance control almost any challenge in the systems or any radar device.

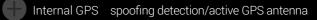
V6 XPLORER V6 XPLORE	0		
Frequency Band	IQ POI	Sweep Speed	RTBW
5GHz - 90GHz	30   20 ns	500GHz/s 3THz/s	60MHz

	1 Rx	Design	USB Desktop
		Weight	850 g
NL	-170 dBm/Hz	SKU#	102/060

V6 XPLORER				
Frequency Band	IQ POI	Sweep	Speed	RTBW
5GHz - 110GHz	30   20 ns	500GHz/s	3THz/s	60MHz
		Design	USB Des	kton
Rx 1 Rx Tx -		Weight	850 g	

#### Hardware Options

Ultra Fast Tictoc LO	3THz/s sweep speed
Ultra Low Noise Preamp	Additional 20 dB of gain











High-performance SPECTRAN® V6 real-time outdoor spectrum analyzer with tablet formfactor



# Real-Time Mobile Outdoor Spectrum Analyzers

OUTDOOR	
INDOOR	BATTERY POWERED
MOBILE	V6CUSTOMIZED



#### V6 Mobile 100SA-6

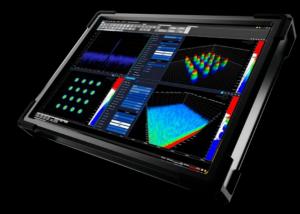
u <b>ency Band</b> Hz - 6   8 GHz	<b>IQ POI</b> 30   20 ns	Sweep Speed 500GHz/s		RTBW 44MHz
1 Rx		Design	Outdoor	Tablet
		Weight	TBA	
-170 dBm/H	Hz	SKU#	TBA	

#### mobile handheld spectrum sets it apart is its complete analyzer! Our cutting-edge adaptability - you can customsolution is designed for pro- ize it with any SPECTRAN<sup>®</sup> V6 fessionals on the move, offer- to meet your specific requireing real-time spectrum anal- ments.

Introducing the ultimate ysis at your fingertips. What

screen-capable RTSA Suite with a long-lasting battery, PRO software ensures a us- you can stay connected and er-friendly experience, making capture crucial data for exspectrum analysis easier and tended periods.

Our optimized touch- more efficient than ever. Plus,



#### V6 Mobile 2000SA-6

	requency Band     IQ F       10MHz-6 8 GHz     15 10		Sweep Speed 730   1100GHz/s		<b>RTBW</b> 160 245MHz
Rx	2 Rx		Design	Outdoor	Tablet
Тх	1 Tx		Weight	TBA	
DANL	-170 dBm/H	łz	SKU#	TBA	

Internal GPS spoofing detection/active GPS antenna

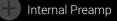
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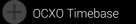
#### V6 Mobile 500SA-50

<b>Frequenc</b> 250MHz - 24 - 53	7.5GHz	<b>IQ POI</b> 30   20 ns	Sweep S 500GHz/s		RTBW 60MHz
Rx	2 Rx		Design	Outdoor	Tablet
Tx			Weight	ТВА	
DANL	-170 dBm/H	łz	SKU#	ТВА	

#### Hardware Options

Frequency Extention WiFi6E	Mobile ECO/PLUS only
245 MHz I/Q RTBW	Mobile PLUS only





ultra high vibration resistance

additional 20 dB of gain



# Real-Time Rugged Outdoor Spectrum Analyzers

- - - - - LAS







Ultra-stable SPECTRAN® V6 real-time outdoor spectrum analyzer with laptop formfactor

### Real-Time Rugged Outdoor Spectrum Analyzers

OUTDOOR	BATTERY POWERED
MOBILE	V6CUSTOMIZED

#### MIL 250MA-6

uency Band	IQ POI	Sweep	Speed	RTBW
1Hz - 6   8GHz	30 ns	300GH	Hz/s	80MHz
1 Rx		Design	Outdoo	or Laptop
		Weight	9.5 kg	
-165 dBm	/Hz	SKU#	102/01	13

The SPECTRAN® V6 MIL MIL-STD-810G and IP65 stan-250MA-6 consists of an en- dards. The V6 MIL 500MA-6 try-level real-time spectrum also features a vector signal analyzer built into a powerful generator while the high-end and extremely shock-resis- SPECTRAN® V6 2000MA-6 tant outdoor laptop certified to spectrum analyzer is equipped

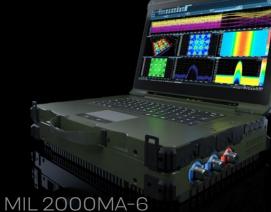
160MHz 245MHz) real-time bandwidth. is ideal for all mobile applica-It is ideal for all mobile ap- tions in the field as it is capaplications in the field as it is ble of capturing and displaycapable of capturing and dis- ing signal transmissions in playing signal transmissions every conceivable way

(optional in every conceivable way. It



#### MIL 500MA-6

Frequency Band		IQ POI	Sweep Speed		RTBW	
10MHz - 6 8GHz 20 ns		440GHz/s		120MHz		
						Ī
lx 1	1 Rx		Design	Outdoc	or Laptop	
īx 1	1 Tx		Weight	9.5 kg		
ANL -	168 dBm/	'Hz	SKU#	102/01	4	

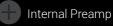


Frequency Band		IQ POI	Sweep Speed		RTBW
10MHz-6	8GHz	15/10 ns	730 1100G	Hz/s	160/245MHz
Rx	2 Rx		Design	Outdoo	or Laptop
Tx	1 Tx		Weight	9.5 kg	
DANL	-170 dBm	/Hz	SKU#	102/0	15

#### Hardware Options

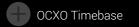
120 MHz I/Q RTBW	V6 N
245 MHz I/Q RTBW	V6 MIL





2/4/8 TB Memory

additional 20 dB of gain

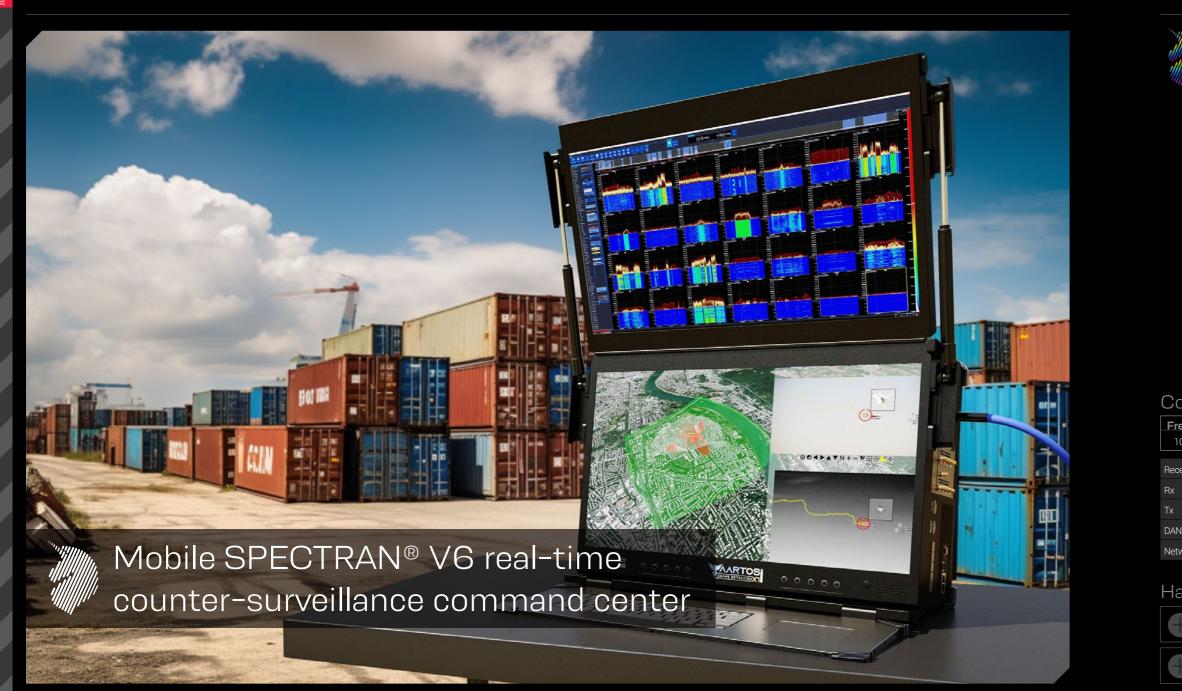


ultra high vibration resistance

Internal GPS spoofing detection/active GPS antenna

### Real-Time Command Centers

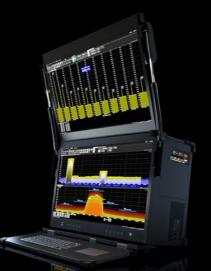




### **Real-Time Command Centers**

HIGH END	
OUTDOOR	MOBILE
INDOOR	V6CUSTOMIZED





#### Command Center 2000CA-6

ver 1 RAM 32 GB 1 Rx Storage -/ 4 TB - Design Mobile Command Center Weight 30 kg					
ver 1 RAM 32 GB 1 Rx Storage -/ 4 TB - Design Mobile Command Center Weight 30 kg	quency Band	IQ POI	Sweep	Speed	RTBW
1 Rx     Storage     -/ 4 TB       -     Design     Mobile Command Center       -165 dBm/Hz     Weight     30 kg	MHz-6 8GHz	15 ns	730G	Hz/s	160MHz
1 Rx     Storage     -/ 4 TB       -     Design     Mobile Command Center       -165 dBm/Hz     Weight     30 kg					
- Design Mobile Command Center -165 dBm/Hz Weight 30 kg	ver 1		RAM	32 GB	
-165 dBm/Hz Weight 30 kg	1 Rx		Storage	-/4TB	
			Design	Mobile Co	mmand Center
ork 10 GbE SKU# 102/016	-165 dBm/Hz		Weight	30 kg	
	ork 10 GbE		SKU#	102/016	

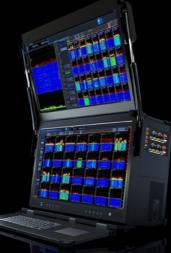
#### Hardware Options

Dual 245 MHz I/Q RTBW	PRO/I
245 MHz Tx Data rate	PRO/E



with expandable 160 MHz lent performance for all basic RTBW or more than 730 measurement scenarios in a GHz/s sweep. Thus, this cus- mobile dual-screen system. tomizable high-end spectrum With up to 490 MHz RTBW

Even the basic version shines analyzer already offers excel-



### Command Center 4000CA-6

lne	ncy Band	IQ POI	Sweep Speed		RTBW
лНz	- 6   8GHz	15/10 ns	1460/2200GHz/s		320/490MHz
/er	2		RAM	64 GB	
	4 Rx		Storage	4 / 8 TB	
	2 Tx		Design	Mobile Co	ommand Center
	-170 dBm/Hz		Weight	30 kg	
ork	2x 10 GbE		SKU#	102/017	

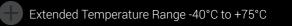
the 4000CA-6 variant already tonishing RTBW of up to 980 is one of the fastest real-time MHz combined with a sweep spectrum analysis solutions speed of more than 4 THz/s. in the world, only surpassed

or more than 2 THz/s sweep by the 8000CA-6 with an as-



### Command Center 8000CA-6

	• 6 ∣ 8GHz	<b>IQ POI</b> 15/10 ns	Sweep Speed 2920/4400GHz/s		<b>RTBW</b> 640/980MHz
Receiver	4		RAM	128 GB	
Rx	8 Rx		Storage	8 / 24 TB	
Tx	4 Tx		Design	Mobile Co	ommand Center
DANL	-170 dBm/Hz		Weight	30 kg	
Network	2x 100 GbE		SKU#	102/018	



Internal Preamp

additional 20 dB of gain



OCXO Timebase ultra high vibration resistance

### Real-Time Remote Outdoor Spectrum Analyzers







Remote SPECTRAN<sup>®</sup> V6 real-time spectrum analyzer for outdoor use (IP66)

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### Real-Time Remote Outdoor Spectrum Analyzers

OUTDOOR	REMOTE
STATIONARY	V6CUSTOMIZED

The SPECTRAN® V6 RODB V6 real-time spectrum analineup feature an IP66 certified lyzer and Mini-PC for remote outdoorbox incl. SPECTRAN<sup>®</sup> data analysis and streaming.

RTBW 2x44MHz

/ 64 GB

ote IP66

The bigger flagship 2000RA-6 is not only the most performing variant but is also perfectly

uited for 24/7 spectrum mon-
toring, since the data storage
an be upgrade to up to 30 TB

#### RODB 100RA-6

<b>uency</b> Hz-6 8	<b>/ Band</b> 3GHz	IQ POI 40 ns	Sweep S 500GH		<b>RT</b> 44
er			Network	1 GbE	
	1 Rx		RAM	32 GB	/ 64 GB
			Storage	1/4T	B
	-165 dBm	/Hz	Design	Remo	te IP66
			SKU#	102/0	08

Età III

#### RODB 200RA-6

<b>quency Band</b> kHz - 6   8GHz		IQ POI 30 ns		Sweep S 3THz/	
iver				Network	1 Gt
	2 Rx			RAM	32 G
				Storage	1/8
	-168 dBm/Hz			Design	Ren
				SKU#	102



#### RODB 2000RA-6

requency Band		IQ POI	Sweep Speed		RTBW
10MHz - 6   8GHz		15/10 ns	730 1100GHz/s		160/245MHz
eceiver			Network	1 GbE	
	2 Rx		RAM	32 GB	/ 64 GB
	1 Tx		Storage	1/30	ТВ
NL	-170 dBm	/Hz	Design	Remot	e IP66
			SKU#	102/0	10

### Real-Time Rack-Mounted Spectrum Analyzers

19" SPECTRAN® V6 analyzer rack solutions









States States

### Real-Time Rack-Mounted Spectrum Analyzers

HIGH END INDOOR REMOTE V6CUSTOMIZED STATIONARY

Our all-inclusive solution is your desired frequency specdesigned to meet all your trum from anywhere. spectrum monitoring and Our 6GHz IQ real-time specstreaming requirements. With our remote spectrum you with instant insights, almonitoring capabilities, you lowing you to make informed can keep a watchful eye on decisions at lightning speed.

trum monitoring empowers

ture ensures you never miss lessly to your unique needs. a beat, capturing vital data Furthermore, our system is around the clock. Supporting up to 6 freely con- ing to your specific workflow. figurable SPECTRAN® V6 Real-Time Spectrum Analyzers,

Our 24/7 data streaming fea- our solution scales effortentirely customizable, adapt-

#### 1RU RSA V6 Spectrum Analyzer Configurable with any SPECTRAN<sup>®</sup> V6 Spectrum Analyzer

ver		Sweep	Up to 3 THz/s
	Up to 2	Network	100 GbE
	Up to 1	Storage	16 TB Highspeed SSD
BW	Up to 245 MHz/s	Design	1RU 19" server rack
I	Up to 10 ns	SKU#	102/XXX



#### 2RU RSA V6 Spectrum Analyzer

Configurable with any SPECTRAN® V6 Spectrum Analyzers

eceiver	2	SI	weep	Up to 6 THz/s
x	Up to 4	N	etwork	100 GbE
x	Up to 2	St	torage	? TB Highspeed SSD
x RTBW	Up to 490 MHz/s	D	esign	2RU 19" server rack
) POI	Up to 10 ns	SI	KU#	102/XXX



#### 4RU RSA V6 Spectrum Analyzer Configurable with any SPECTRAN<sup>®</sup> V6 Spectrum Analyzers

Receiver	Up to 6	Sweep	Up to 18 THz/s
Rx	Up to 12	Network	100 GbE
Tx	Up to 6	Storage	? TB Highspeed SSD
Rx RTBW	Up to 1.470 MHz/s	Design	4RU 19" server rack
IQ POI	Up to 10 ns	SKU#	102/XXX

### Real-Time IQ Recording Spectrum Analyzers





### Real-Time IQ Recording Spectrum Analyzers

HIGH END INDOOR REMOTE V6CUSTOMIZED STATIONARY



#### IQ Recorder V6 Spectrum Analyzer Configurable with any SPECTRAN® V6 Spectrum Analyzers

ver	Up to 10	IQ POI	Up to 10 ns	Storage	Up to 1000 TB
	Up to 20	Sweep	Up to 30 THz/s	Design	10RU 19" server rack
	Up to 10	Network	100 GbE	SKU#	102/000
BW	Up to 2500 MHz/s				

Elevate your spectrum analysis istics, including amplitude and for up to 10 V6 spectrum anato new heights with our all-inclu- phase, making it incredibly de- lyzers and tailor the system to sive solution. Enjoy 24/7 IQ data tailed. recording and remote real-time The recorded data can be fully configurable platform. spectrum monitoring. It records a continuous stream celerated time, allowing for de- Enhanced by a high-perforof IQ (In-phase and Quadrature) tailed analysis, simulation, and mance server, our solution endata, providing a complete pic- decision-making in controlled sures you have the power and ture of the spectrum. This data environments.

played back in real-time or ac-

your unique workflow with our

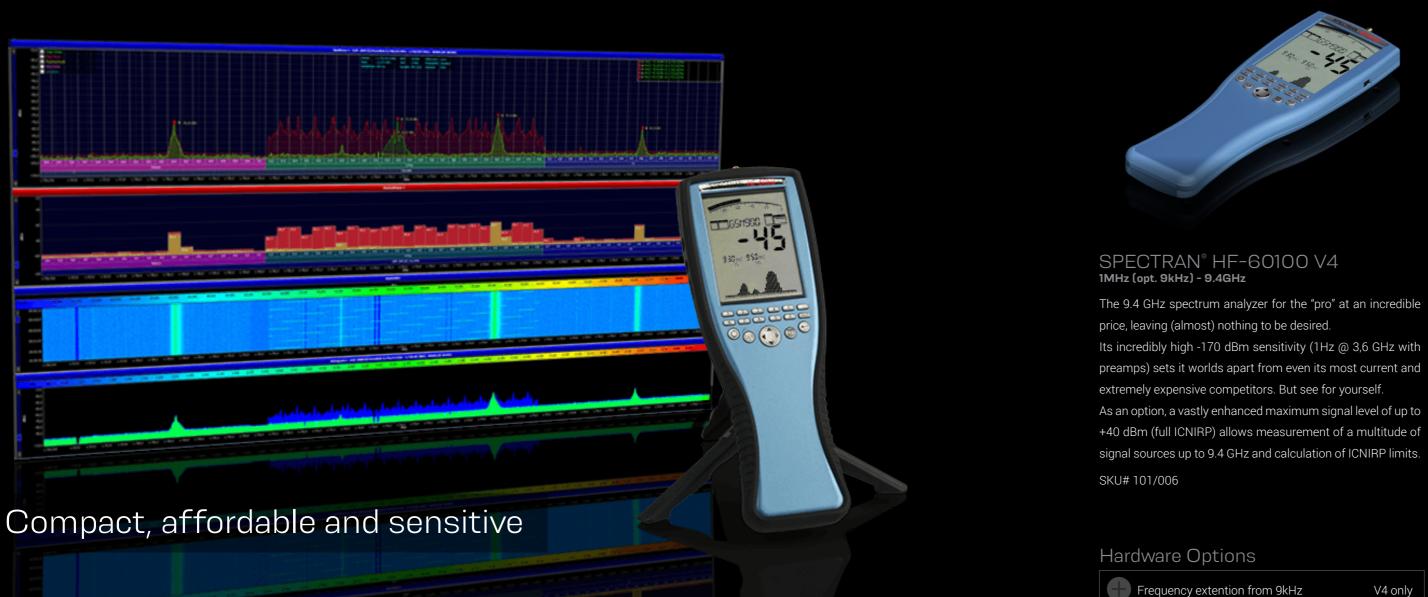
flexibility you need for unparalcaptures all signal character- Scale effortlessly with support leled spectrum management.



#### IQ Recorder Enterprise V6 Spectrum Analyzer Configurable with any SPECTRAN® V6 Spectrum Analyzers

Receiver	Up to 6	IQ POI	Up to 10 ns	Storage	Up to 1000 TB
Rx	Up to 12	Sweep	Up to 6.6 THz/s	Design	2RU 19" server rack
Тх	Up to 6	Network	100 GbE	SKU#	102/027
Rx RTBW	Up to 1500 MHz/s				

### Sweep Spectrum Analyzers



### Sweep Spectrum Analyzers



#### SPECTRAN® NF-5030 1Hz - 1MHz (opt. 20MHz / 30MHz)

AC analog input with high sensitivity (down to 200 nV). Absolutely essential: The high performance multi-channel 65MSPS 12Bit DDC frequency filter (option 005) allows fast, extremely sensitive and super crisp frequency measurement of very weak signals down to 1pT (0.001 nT). Measurement of the 125-135 kHz RFID band (decoder software already in development) and more. By adding the 20 MHz or 30 MHz frequency extensions, complete new applications become possible, e.g. assessment of the 13.56 MHz RFID and VDSL2 frequency bands.

SKU# 101/001



#### SPECTRAN<sup>®</sup> NF-5030 S 1Hz - 1MHz (opt. 20MHz / 30MHz)

Our high power spectrum analyzer for the professional at an unbeatable price! Ultra broad range and high accuracy. Frequency range according to complete ICNIRP (public)! Perfect for Pre-Compliance and EMC/EMI tests up to 30 MHz. By adding the 20 MHz or 30 MHz frequency extensions, completely new applications become possible, e.g. assessment of the 13.56 MHz RFID and VDSL2 frequency bands. A MUST-HAVE for EMC measurements. An ideal solution for technicians and authorities for accurate examination of signal sources up to 30 MHz

SKU# 101/003



### Solutions and Bundles





# Selected components and well thought-out packages

### Solutions and Bundles



- Real-Time EMC Bundle 1 Near Field 10MHz - 6GHz (opt. 8GHz), u. from 9kHz
- · PBS2 case consisting of 5 probes, SMB cable 1m and mini tripod/pistol grip
- · SPECTRAN<sup>®</sup> V6 500XA-6 in a box with power supply, 3 USB cables, USB stick
- SKU# 104/005



- Real-Time EMC Bundle 2 Far Field 10MHz - 6GHz (opt. 8GHz)
- · BicoLOG<sup>®</sup> 20100E in a carrying case
- · HyperLOG® 6080 case consisting of SMA cable, SMA tool and
- mini tripod/pistol grip
- · SPECTRAN® V6 500XA-6 in a box with power supply, 3 USB cables, USB stick
- SKU# 104/006

#### Real-Time EMC Bundle 3 - Near/Far 10MHz - 6GHz (opt. 8GHz), u. from 9kHz

- · BicoLOG<sup>®</sup> 20100E in a carrying case
- · HyperLOG<sup>®</sup> 6080 case consisting of SMA cable, SMA tool and mini tripod/pistol grip
- · PBS1 case consisting of 5 probes, SMB cable 1m and mini tripod/pistol grip
- · SPECTRAN<sup>®</sup> V6 500XA-6 in a box with power supply, 3 USB cables, USB stick
- SKU# 104/007

product design. For example, shielding problems can be local- surement at a spectacular price. financial effort in product development.

The Aaronia real-time EMC measurement instrument packages Based on a completely new method of spectrum analysis, Aaro- quency and signal strength as well as the simultaneous display

their cause is no longer a problem. The determination of fre- dividually manufactured and calibrated at Aaronia in Germany.

enable EMC diagnostics in a completely new way, even during in in measurement devices enable RF and EMC real-time mea- of several limit values significantly increases the speed of the measurement. Thus, Aaronia spectrum analyzers contribute deized and the success of countermeasures can be analyzed in With a real-time bandwidth of min. 80MHz, unrivaled in its class, cisively to the timely and EMC-compliant development of new real time. This significantly reduces the time and thus also the finding even extremely short duration interfering signals and products. All SPECTRANs and all antennas are developed, in-

### Solutions and Bundles



Pro Bundle 1Hz -1MHz / 1MHz - 9.4GHz

· Spectran<sup>®</sup> NF-5030 incl. option 005 • Spectran<sup>®</sup> HF-60100 V4 incl. option 020 HyperLOG<sup>®</sup> 60100

SKU# 104/001



SKU# 104/004

- · USB cable
- Pistol grip

enable RF and EMC measurements at a spec- Aaronia spectrum analysers. tacular price

Finding sources of interference and their caus- mance limit value display. A single keystroke Award in the field of "passive components": es, determining frequency and signal strength, is all it takes for the high-performance digital All SPECTRAN® NF are equipped with the category "Passive Components".

All SPECTRAN<sup>®</sup> handhelds offer a high perfor- analyzers in this price range.

Based on a completely new method of spec- measuring and evaluating even the most com- signal processor (DSP) to calculate the limit award winning Aaronia REAL 3D (isotropic) trum analysis, Aaronia measuring instruments plex limit values - all this is easily possible with values and show the results on the display in magnetic field sensor. In 2009, Europe's most real time. This function is unique for spectrum popular electronics magazine "Elektronik" awarded the Aaronia REAL 3D (isotropic) magnetic field sensor as "Product of the Year" in the

### Solutions and Bundles



Site Survey Bundle 1 10 MHz - 3 GHz | RTBW 80 MHz

· SPECTRAN® V6 PLUS 250XA-6 incl. Option 0401 GPS · IsoLOG<sup>®</sup> 3D Mobile 9030 PRO with N/SMA adapter

• Two power supplies

· GPS antenna with 5m cable

SKU# 104/008

#### Site Survey Bundle 2 10 MHz - 6 GHz | RTBW 80 MHz

· SPECTRAN<sup>®</sup> V6 PLUS 250XA-6 incl. Option 0401 GPS

· IsoLOG<sup>®</sup> 3D Mobile 9060 PRO with N/SMA adapter

· Two power supplies

· USB cable

· Pistol grip

· GPS antenna with 5m cable

SKU# 104/009

#### Site Survey Bundle 3 10 MHz - 8 GHz | RTBW 80 MH;

· SPECTRAN® V6 PLUS 250XA-6 incl. Option 0401 GPS and Op-

#### tion 6080 Frequency Extension

- · IsoLOG<sup>®</sup> 3D Mobile 9080 PRO with N/SMA adapter
- · Two power supplies
- · USB cables
- · Pistol grip
- · GPS antenna with 5m cable

#### SKU# 104/010

signal snalysis and testing out in the field.

SPECTRAN® V6 PLUS sets new standards in the USB compact of real-time or sweep recordings and also offers an autorotate the SPECTRAN® V6 and provides the required voltage and powclass with a sweep speed of over 1 THz/s. Our user-friendly soft- function for virtually unlimited recording time. Once recorded, the er, and up to two additional devices can be supplied via USB.

Combing our ultra-fast yet lightweight SPECTRAN® V6 PLUS ware detects unknown or illegal transmissions over a wide fre- entire measurement data can be converted into the software. spectrum analyzer with the perfectly matching isotropic hand- guency range. Helpful features such as a 3D spectrogram view Although spectrum monitoring usually consumes a large held antenna IsoLOG® 3D Mobile PRO incl. all needed acces- displaying the signal in a unique manner, allow for a deep-dive amount of power, the SPECTRAN® V6 (in combination with our sories in a robust outdoor case creates the perfect bundle for analysis of the real-time measurement or recorded data. De- Powerbank, optionally integrable) can run for hours in a compending on the laptop used, the system can store several hours pletely portable setup. The Powerbank is specially designed for

### Additional components

ADD-ONV6 - BEYOND REALTIME -ACCESSORIES FOR THE SPECTRAN V6





#### **Directional Coupler** 50MHz - 6000MHz

Connectors	SMA (f)
Impedance	50 Ohm
Coup. flatness	± 0.45dB
Directivity	up to 33dB
VSWR(typ.)	1.2:1
Insertion loss	2dB
Op. temp.	-40 to 85°C
Design	USB Desktop
SKU#	502/017

High-directivity directional couler. Provides outstanding diectivity and excellent coupling latness from 50 to 6000 MHz, making S-parameter measurenents and intermodulation neasurements as well as other est and system applications possible.



### Splitter / Combiner

400MHz - 8GHz | 700MHz - 6GHz | DC - 8GHz

Connectors	SMA (f)
Impedance	50 Ohm
Power handling	2W
Amp. balance	± 0.8 dB
Isolation	≥6dB
Insertion loss	≤ 15 - 20 dB
Design	USB Desktop
~	

External 4- or 6-way low-loss plitter/combiner (e.g. stitch nultiple V6 units to expand the eal-time bandwith). utomatically locking and stackable on SPECTRAN<sup>®</sup> V6 devices, F-over-Fiber-converter-sysems and V6 powerbanks.



Active Splitter / Combiner

SMA (f)

50 Ohm

≥6dB

≤0-5dB

Various

USB Desktop

Connectors

mpedance

Isolation

**CKI 1#** 

nsertion loss

Power handling 2W

Amp. balance ± 0.8 dB

400MHz - 8GHz | 700MHz - 6GHz | DC - 8GHz

Active external 4- or 6-way low-
loss splitter/combiner (e.g.
stitch multiple V6 units to ex-
pand the real-time bandwith).
Automatically locking and stack-
able on SPECTRAN® V6 devices,
RF-over-Fiber-converter-sys-
tems and V6 powerbanks.

ADD-ONV6 — BEYOND REALTIME — ACCESSORIES FOR THE SPECTRAN V6



#### **Broadband Power Amplifier** 10MHz to 70GHz | 50dB Gain

ctors	1.85 mm (V)
ance	50 Ohm
	Typ. 50 dB
	+15 dBm
50GHz)	6 dB
turn Loss	-5 dB
	USB Desktop

Vith an impressive 50dB gain, is compact amplifier delivers nparalleled power across a vide frequency range, ensuring timal performance in diverse oplications. leal for demanding environnents, our amplifier is engieered to provide reliable and consistent signal amplification,

making it a valuable asset in research, communication, and testing scenarios.



#### RF over Fiber 10MHz to 4 | 6 | 10 | 16GHz

Cable damping is a thing of the past! Aaronia's RF over Fiber solution impresses with its extremely high dynamics and linear frequency response. This makes it possible for the first time to transmit RF signals quasi 1:1 via fiber optics.

This allows cable lengths of up to 100km to be achieved. Additionally, a galvanic separation between transmitter and receiver is achieved.

Automatically locking and stackable on SPECTRAN® V6 devices, 4-way splitter/combiner and V6 powerbanks. Requires "OS2 Single Mode" fiber optics with "FC/APC connectors".

SKU# various



#### SPECTRAN<sup>®</sup> V6 Powerbank 26800mAh

The Aaronia Powerbank with its 26800mAh allows a high runtime extension of the SPECTRAN® V6 with a laptop. The battery of the laptop is conserved because the SPECTRAN<sup>®</sup> V6 is only operated via the powerbank.

The powerbank is specially designed for the SPECTRAN<sup>®</sup> V6 and provides the required voltage and power, and up to two additional devices can be supplied via USB. Allows a runtime of the SPECTRAN<sup>®</sup> V6 of up to 4-5 hours.

Automatically locking and stackable on SPECTRAN® V6 devices, V6 powerbanks, RF-over-Fibre-converter-systems and 4-way splitter/combiner.

SKU# 503/022

### USB Real-Time Vector Signal Generators

SPECTRAN'V6 VECTOR SIGNAL GENERATOR VSG







USB desktop SPECTRAN® V6 vector signal generators

### USB Real-Time Vector Signal Generators



#### VSG 50A-6

uency Band	Power	Sweep
Hz - 6 GHz	+20 dBm	5000

	1 Tx
W	44MHz
ower	+20 dBm
	500GHz/s
	850 g
	USB Desktop
	401/007

The SPECTRAN® V6 VSG44 of-
fer up to 44MHz instantaneous
streaming bandwidth (complex
I/Q) as a vector signal generator/
tracking generator from 9kHz to
6   8GHz.
The following modulations are
already included and can be
used out-of-the-box: Sweep,
Noise, Pulse, FSK, QAM, OFDM,
Echo/Reflection

Speed

RTBW

44MHz

### VSG 120A-6

Frequency Band	Power
75 MHz - 6 GHz	+20 dBn

Тх	1 Tx
Tx RTBW	120MHz
Max. Power	+20 dBm
Sweep	440GHz/s
Weight	850 g
Design	USB Desktop

SKU#

The SPECTRAN<sup>®</sup> V6 VSG120 offer up to 120MHz (via 2xUSB) instantaneous streaming bandwidth (complex I/Q) as a vector signal generator/tracking generator from 75MHz to 6GHz. The following modulations are already included and can be used out-of-the-box: Sweep, Noise, Pulse, FSK, QAM, OFDM, Echo/Reflection

Sweep Speed

440GHz/s

RTBW

120MHz

### VSG 240A-6

x RTBW

SKU#

Frequency Band	Pov
75 MHz - 6 GHz	+20 0

Max. Power +20 dBm

1 Tx

240MHz

850 g

USB Desktop

401/006

Sweep Speed 1100GHz/s

Echo/Reflection

The SPECTRAN® V6 VSG240 offer up to 240MHz (via 2xUSB) instantaneous streaming bandwidth (complex I/Q) as a vector signal generator/tracking generator from 75MHz to 6GHz. The following modulations are already included and can be used out-of-the-box: Sweep, Noise, Pulse, FSK, QAM, OFDM,

RTBW

240MHz

### Aaronia Antennas

alog are color-coded to help tive antenna, with O "limited development and construc- surement scenarios can thus special and unique solutions by Aaronia. Here, Aaronia AG you find the ideal spectrum usage" only a restricted range tion of guality antennas of be served. This includes, for such as IsoLOG® 3D track- guarantees the highest guality analyzer to match. The ● "ide- is available. al choice" covers the complete

Cost-effective and powerful

Real-time signal monitoring

Direction finding

Geolocation

antennas

Constant gain

Omnidirectional / biconical

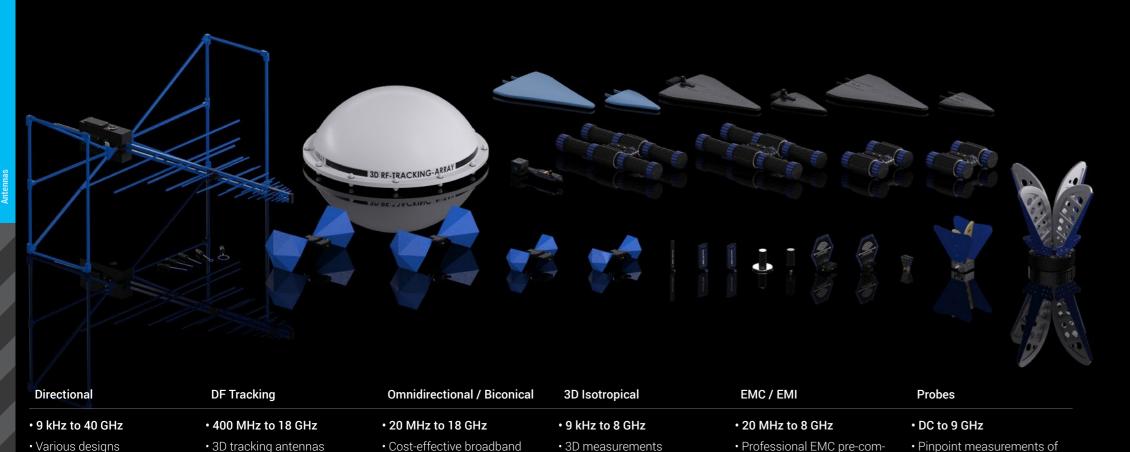
All antennas listed in this cat- frequency range of the respec- Aaronia AG specializes in the in Germany, almost all mea- in the laboratory, but also very detection system developed all types. With the antennas example, measurements in ing antennas, which are also at reasonable conditions. developed and manufactured the field, EMC measurements used for the AARTOS drone

interference sources

and filter measures

Estimate intereference field

strengths, check shieldings



Integrated preamplifiers

High gain and low noise

- Unrivaled bandwidth
- High directivity and gain
- For the laboratory and in
- the field

pliance test antennas

Unsurpassed accuracy

Very high gain

Our E

and

straid

and

tion a

### Sniffer & Probes



SKU#

tor SMB (f)	
//C near field probe set	(
ery spectrum analyzer	i
scilloscope allows for	
ntforward pinpointing	ő
neasurement of inter-	(
e sources from DC to	ő
in electronic compo-	İ
roups as well as execu-	
nd monitoring of gener-	(
C measurement.	

Our sniffer set includes a tol of 5 probes: 4 probes for agnetic field measurement nd one for measurement electric fields. All probes e covered with an insulatg layer, thus allowing safe easurement of oscillators mains lines. Perfect for cating interference sources

203/002

#### Probe Set PBS 2

Passive: DC - 9GHz | Active: 1MHz - 9GHz

#### Connector SMB (f)

which might have been found can be skipped. e.g. in an EN55011, EN55022 The PBS2 probe-set additionor EN50371 (Class A or Class ally contains a high-perfor-B) survey. After implementing mance preamplifier, allowing appropriate changes in the measurement of significantly circuit, their efficiency can weaker interference sources, easily and reliably be veri- boosting the sensitivity of our fied. That way, expensive and instruments by up to 40dB. time-consuming re-assessments in an EMC laboratory

SKU#

0000

#### RF Satellite Test Probe 5MHz - 2500MHz

#### Dimensions 50x58x14 mm

allows direct measurement at mal operation. the LNB output or at the satel- The built-in DC blocker suplite receiver.

performed with simultaneous nected spectrum analyzers. use of the connection, the The package includes the probe offers two separate sig- necessary accessories (SMA nal outputs for the connected to F adapter, 0.3m SMA caspectrum analyzer as well as ble, 1.5m F cable) for direct the receiver.

The RF Satellite Test Probe tion and recording during nor-

SKU# 203/004

presses DC voltage which The measurement can be would be dangerous for conconnection of the measuring This allows a signal evalua- device and the receiver.

### PowerLOG<sup>®</sup> Antennas

The PowerLOG<sup>®</sup> series is suitable for both transmitting and receiving purposes. Due to the very high maximum transmit power of up to 500W (peak), the PowerLOG<sup>®</sup> series is particularly suitable for EMC or interference emission measurements. The delivery of each Aaronia PowerLOG<sup>®</sup> antenna includes the complete high resolution calibration data with a high number of calibration points (certificate and download link to Excel file included).

#### PowerLOG<sup>®</sup> PRO

The double polarized quad-ridged horn antennas of the PowerLOG® PRO series are characterized by enormous broadband and very high transmit power. The gain increases with increasing frequency up to max. approx. 14 dBi and generates a constant field strength virtually independent of frequency. This predestines the PowerLOG<sup>®</sup> PRO especially for EMI compliance tests, since the amplifier does not have to be readjusted depending on the frequency, which saves considerable calibration and measurement effort.

Another special feature of the PowerLOG® PRO is its two inputs. This allows a horizontally or vertically polarized measurement without the need for an error-prone reconfiguration of the antenna.

#### **PowerLOG**<sup>®</sup>

The horn antennas of the standard PowerLOG<sup>®</sup> series are characterized by enormous broadband and very high input power. The gain increases with increasing frequency up to max. approx. 17 dBi. This gain increase compensates for the increasing cable losses at higher frequencies.

#### PowerLOG<sup>®</sup> PRO 30300 EMI Double Pole Broadband Horn - 300MHz - 3GHz

Input level	500W (CW)	Connector	2x N (f)
Active	No	Dimensions	510x507x507 mm
Gain (max.)	14 dBi	SKU#	205/004

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#### PowerLOG<sup>®</sup> PRO 30600 EMI

 $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ Double Pole Broadband Horn - 300MHz - 6GHz

Input level	500W (CW)	Connector	2x N (f)
Active	No	Dimensions	510x507x507 mm
Gain (max.)	12 dBi	SKU#	205/006

#### PowerLOG<sup>®</sup> PRO 30800 EMI Double Pole Broadband Horn - 300MHz - 8GHz 0000

Input level	500W (CW)	Connector	2x N (f)
Active	No	Dimensions	510x507x507 mm
Gain (max.)	14 dBi	SKU#	205/005

#### Suited for: Suited for: SECO PLUS SG SCALE AND SUITED SECO SCALE AND SECOND

# PowerLOG<sup>®</sup> 10800 Broadband Horn - 1GHz - 8GHz

$\bigcirc \bigcirc $
$\sim$

400W (peak)	Connector	N (f)
No	Dimensions	135x252x175 mm
13 dBi	SKU#	205/001

#### PowerLOG<sup>®</sup> 70180

Broadband Horn - 700MHz - 18GHz

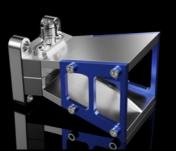
$\cap$	$\cap$	$\sim$	$\cap$
	$\cup$	Ο	$\cup$

evel	500W (peak)	Connector	N (f)
	No	Dimensions	135x252x175 mm
nax.)	17 dBi	SKU#	205/002

#### PowerLOG<sup>®</sup> 40400 Broadband Microwave Horn - 14GHz - 18GHz

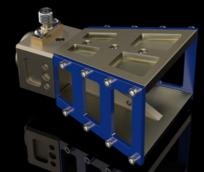
### PowerLOG<sup>®</sup> / Magnetic Field Antennas

Suited for: SECO PLUS SG XPLORER | Sideal choice C Limited usage



PowerLOG<sup>®</sup> 50700 Ultra Wideband Waveguide Horn - 5GHz - 70GHz 0000

level	50W (peak)	Connector	1.85mm V (f)
	No	Dimensions	32x34x50 mm
max.)	25 dBi	SKU#	205/007



level	300W (peak)	Connector	K 2.92mm (f)
	No	Dimensions	74x55x38 mm
(max.)	17 dBi	SKU#	205/003

Agronia MDF	Aaronia MDF
the address	The adv
560	

Connector SMA (f)

206/005

	Magnetic Field DF Antenna - 500kHz - 60 MHz		0	C
--	---	--	---	---

tive	No
in (max.)	-60 dBi

lBi		SKU#

#### MDF 9400

Magnetic Field DF Antenna - 9kHz - 400 MHz  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

ctive	No	Connector	SMA (f)
ain (max.)	-60 dBi	SKU#	206/006

#### MDF 930X

Active Magnetic Field DF Antenna - 9kHz - 30 MHz

Active	Yes	Connector	SMA (f)
Gain (max.)	-30 dBi	SKU#	206/007

#### **MDF 960X**

 $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

Active Magnetic Field DF Antenna - 9kHz - 60 MHz

Active	Yes	Conne
Gain (max.)	-35 dBi	SKU#

	Connector	SMA (f)
	SKU#	206/008

#### MDF 504000X

Active Magnetic Field DF Antenna - 500kHz - 400 MHz

Active	Yes	Connector	SMA (f)
Gain (max.)	-20 dBi	SKU#	206/009



#### MagnoTRACKER LF-2

Active Magnetic Field DF Antenna - 9kHz - 1MHz

Active	Yes	Connector	SMA (f)
Gain (max.)	35 dBi	SKU#	206/001

#### MagnoTRACKER ELF-2

Active Magnetic Field DF Antenna - 1Hz - 9kHz

Active	Yes	Connector	SMA (f)
Gain (max.)	35 dBi	SKU#	206/003

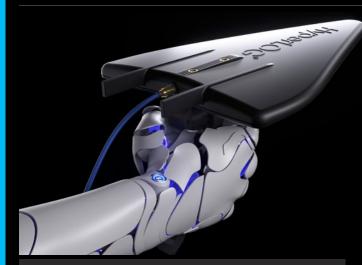
#### MagnoTRACKER LF-6 Active Magnetic Field DF Antenna - 9kHz - 1MHz

Active	Yes	Connector	SMA (f)
Gain (max.)	35 dBi	SKU#	206/002

### MagnoTRACKER ELF-6 Active Magnetic Field DF Antenna - 1Hz - 9kHz

Active	Yes	Connector	SMA (f)
Gain (max.)	35 dBi	SKU#	206/004

# HyperLOG<sup>®</sup> PRO Antennas



The powerful directional antennas of the HyperLOG<sup>®</sup> PRO series are a further development of the well-known and popular HyperLOG<sup>®</sup> antennas. They have been significantly improved again in terms of performance, directionality and frequency range.

The excellent performance data of the HyperLOG<sup>®</sup> PRO antenna series can be impressively underpinned by an optional measurement certificate with a large number of measurement points. The HyperLOG® PRO antennas are therefore especially predestined as high-quality measurement antennas for the laboratory, but also for portable measurements or as DF antennas.

Each HyperLOG<sup>®</sup> PRO antenna is extensively measured in our laboratories before delivery. The high-tech housing (radome) is designed to protect against mechanical damage and environmental influences and can optionally be delivered as a waterproof version (IP65) for outdoor applications. Additionally, a high-quality 1/4" thread for tripod mounting is integrated.

### HyperLOG<sup>®</sup> PRO 18200

High Performance DF Antenna - 2GHz - 20GHz 000

Active	No	Connector	2.92 mm K (f)
Gain (max.)	11 dBi	SKU#	201/043

### HyperLOG<sup>®</sup> PRO 18250 High Performance DF Antenna - 2GHz - 25GHz

000

Active	No	Connector	2.92 mm K (f)
Gain (max.)	11 dBi	SKU#	201/037

#### HyperLOG<sup>®</sup> PRO 18300

High Performance DF Antenna - 2GHz - 30GHz

Active	No	Connector	2.92 mm K (f)
Gain (max.)	11 dBi	SKU#	201/038

#### HyperLOG<sup>®</sup> PRO 18350

0000 High Performance DF Antenna - 2GHz - 35GHz

Active	No	Connector	2.92 mm K (f)
Gain (max.)	11 dBi	SKU#	201/039

#### HyperLOG<sup>®</sup> PRO 18400

High Performance DF Antenna - 2GHz - 40GHz 0000

Active	No	Connector	2.92 mm K (f)
Gain (max.)	12 dBi	SKU#	201/040



SKU#

Connector SMA (f)

Connector SMA (f)

201/046

201/044

#### HyperLOG<sup>®</sup> PRO 70140

HyperLOG<sup>®</sup> PRO 70200

Active

Active

Gain (max.) 13 dBi

Gain (max.) 11 dBi

High Performance DF Antenna - 700MHz - 14GHz 0000

High Performance DF Antenna - 700MHz - 8GHz 🛛 🔍 🔍 🔿

Active	No	Connector	SMA (f)
Gain (max.)	13 dBi	SKU#	201/045

High Performance DF Antenna - 700MHz - 20GHz OOO

HyperLOG<sup>®</sup> PRO 70200X Active High Perf. DF Antenna - 700MHz - 20GHz 0000

#### HyperLOG<sup>®</sup> PRO 70260

High Performance DF Antenna - 700MHz - 26.5GHz

SKU#

Active	No	Connector	2.92 mm K (f)
Gain (max.)	13 dBi	SKU#	201/050

# HyperLOG<sup>®</sup> (PRO) Antennas



#### HyperLOG<sup>®</sup> PRO 7080X

Active High Perf. DF Antenna - 700MHz - 8GHz

e	Yes	Connector	2.92 mm K (f)
(max.)	11 dBi	SKU#	201/047

#### HyperLOG<sup>®</sup> PRO 70140X

e	Yes	Connector	2.92 mm K (f)
(max.)	11 dBi	SKU#	201/047

	Yes	Connector	2.92 mm K (f)
(max.)	11 dBi	SKU#	201/049



#### HyperLOG<sup>®</sup> 7025 Low Cost LogPer Antenna - 700MHz - 2.5GHz

Active	No	Connector	SMA (f)
Gain (max.)	5 dBi	SKU#	201/001

#### HvperLOG<sup>®</sup> 7040

Low Cost LogPer Antenna - 700MHz - 4GHz

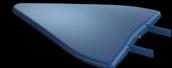
ctive	No	Connector	SMA (f)
ain (max.)	5 dBi	SKU#	201/002

#### HyperLOG<sup>®</sup> 7060

Low Cost LogPer Antenna - 700MHz - 6GHz

Active	No	Connector	SMA (f)
Gain (max.)	5 dBi	SKU#	201/003

With the HyperLOG<sup>®</sup> series, Aaronia offers top-class passive antenna undergoes rigorous testing in our laboratories before directional antennas. The HyperLOG® series supports an ex- shipping and is equipped with a high-quality gold coating, a hightremely wide frequency range from 380 MHz to 35 GHz. This tech antenna housing (radome) to protect against mechanical allows the antennas to be used for measuring Tetra/BOS, direc- damage and environmental influences, an integrated tripod contional radio, various satellite applications, etc. Each HyperLOG<sup>®</sup> nector and an SMA connector with over-rotation protection.



### HyperLOG<sup>®</sup> 6080

Low Cost LogPer Antenna - 680MHz - 8GHz					
Active	No		Connector	SMA (f)	
Gain (max.)	6 dBi		SKU#	201/004	

#### HyperLOG<sup>®</sup> 60100

Low Cost LogPer Antenna - 680MHz - 10GHz					0000
Active	No		Connector	SMA (f)	
Gain (max.)	6 dBi		SKU#	201/005	

#### HyperLOG<sup>®</sup> 60180

Low Cost LogPer Antenna - 680MHz - 18GHz					0000
Active	No		Connector	SMA (f)	
Gain (max.)	6 dBi		SKU#	201/006	

# HyperLOG<sup>®</sup> Antennas

Connector SMA (f)

Connector SMA (f)

201/009

SKU#

Connector SMA (f)

201/029

SKU#

All HyperLOG® X BPA antennas are equipped with an extremely	tenna. Thi
low noise bypass preamplifier (typ. 1.4dB). This means they	measured
can be operated either with an active preamplifier with inte-	be increas
grated rechargeable battery (runtime approx. 3-4 hours or per-	X BPA ante
manently via an enclosed power supply) or as a passive an-	Per DF an

#### SKU# 201/013 Gain (max.) 26 dBi HyperLOG<sup>®</sup> 30180 UWB DF Antenna - 380MHz - 18GHz

Connector SMA (f)

0000

	0000		ctive Bypass DF Antenna - 70			
or	SMA (f)			Active	Yes (with bypass)	
	201/014			Gain (max.)	26 dBi	

### HyperLOG<sup>®</sup> 30250

HyperLOG<sup>®</sup> 30100

Active

Active

Gain (max.) 5 dBi

Gain (max.) 5 dBi

UWB DF Antenna - 380MHz - 10GHz

UWB DF A	0000			
Active	No	Connector	SMA (f)	
Gain (max.)	5 dBi	SKU#	201/015	

#### HvperLOG<sup>®</sup> 30350

UWB DF A	0000			
Active	No	Connector	SMA (f)	
Gain (max.)	6 dBi	SKU#	201/016	

### HvperLOG<sup>®</sup> 7040X BPA /Hz - 4GHz Connector SMA (f)

Active

	Gain (max.)	26 dBi	SKU#	201/030	
С		_0G <sup>®</sup> 7060 ss DF Antenna - 70		Z	

HyperLOG<sup>®</sup> 7025X BPA

Yes (with bypass)

Active Bypass DF Antenna - 700MHz - 2.5GHz

спле вураз	s DF Antenna - 700		2	Астіче Бур	ass LogPer Antenna	- 40019182 -	
Active	Yes (with bypass)	Connector	SMA (f)	Active	Yes (with bypass)	Connector	SMA (f)
Gain (max.)	26 dBi	SKU#	201/031	Gain (max.)	26 dBi	SKU#	201/034

#### Low Cost UWB DF Antenna - 400MHz - 6GHz $\bullet \bullet \circ \circ \circ$ Connector SMA (f) SKU#

HyperLOG<sup>®</sup> 4025

HvperLOG<sup>®</sup> 4040

HvperLOG<sup>®</sup> 4060

No

Gain (max.) 5 dBi

Active No

Gain (max.) 5 dBi

Active No

Gain (max.) 5 dBi

Active

Low Cost UWB DF Antenna - 400MHz - 2.5GHz

Low Cost UWB DF Antenna - 400MHz - 4GHz

Low Cost	UWB DF A	ntenna - 3	380MHz -	8GHz	

Active	No	C	Connector	SMA (f)
Gain (max.)	6 dBi	S	SKU#	201/012

	_OG <sup>®</sup> 3080 IWB DF Antenna	30MHz - 80	GHz	••00
Active	No	Connector	SMA (f)	
		0/11/	001/010	

# HyperLOG<sup>®</sup> Antennas



#### HyperLOG<sup>®</sup> 4025X BPA

Active Bypass LogPer Antenna - 400MHz - 2.5GHz

	Yes (with bypass)	Connector	SMA (f)
(max.)	26 dBi	SKU#	201/032

#### HyperLOG<sup>®</sup> 4040X BPA

e Bypass LogPer Antenna – 400MHz – 4GHz
---

e	Yes (with bypass)	Connector	SMA (f)
(max.)	26 dBi	SKU#	201/033

### HyperLOG<sup>®</sup> 4060X BPA

his allows very weak to extremely strong signals to be without conversion. The gain of the antenna could ased to over 27dBi (passive 5dBi). The new HyperLOG® tennas are therefore probably the most universal Logennas available on the market.



#### HyperLOG® 7025X Active LogPer Antenna - 700MHz - 2.5GHz

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/017

#### HyperLOG<sup>®</sup> 7040X

Active LogPer Antenna - 700MHz - 4GHz

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/018

### HyperLOG<sup>®</sup> 7060X

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/019

range from 380 MHz to 20 GHz.

This means that the antennas can be used for measuring (ac- nector and an SMA connector with over-rotation protection. tive) radar, cellular radio, WLAN, Bluetooth, etc. Each HyperLOG®



### HyperLOG<sup>®</sup> 6080X

Active LogPer Antenna - 680MHz - 8GHz						
Active	Yes		Connector	SMA (f)		
Gain (max.)	45 dBi		SKU#	201/020		

#### HyperLOG<sup>®</sup> 60100X

Active LogPer Antenna - 680MHz - 10GHz

0000

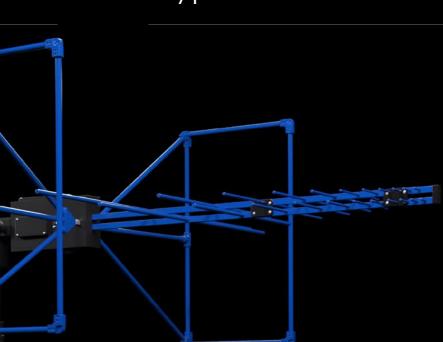
Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/021

### HyperLOG<sup>®</sup> 60200X

Active LogPer Antenna - 680MHz - 20GHz					
Active	Yes		Connector	SMA (f)	
Gain (max.)	21 dBi		SKU#	201/022	

With the HyperLOG<sup>®</sup> X series, Aaronia offers low-cost active di- antenna undergoes rigorous testing in our laboratories before rectional antennas that nevertheless meet the highest require— shipping and is equipped with a high-quality gold coating, a highments. The HyperLOG® X series supports a wide frequency tech antenna housing (radome) to protect against mechanical damage and environmental influences, an integrated tripod con-

#### Aaronia AG | Aaroniaweg 1 | D-54597 Strickscheid | +49 6556 900 310 | www.aaronia.com | mail@aaronia.de | Subject to modifications and errors V.0.2.2



# HyperLOG<sup>®</sup> Antennas



#### HyperLOG<sup>®</sup> 4025X

ACLIVE O VV	D DI Antenna	400	2.50	112	
Active	Yes		Connector	SMA (f)	
Gain (max.)	45 dBi		SKU#	201/023	

#### HyperLOG<sup>®</sup> 4040X

Active UWB	<b>DF</b> Antenna	- 400MHz -	4GHz

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/024

#### HyperLOG<sup>®</sup> 4060X Active UWB DF Antenna - 400MHz - 6GHz

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/025

#### HyperLOG<sup>®</sup> 3080X

Active UWB DF Antenna - 380MHz - 8GHz

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/026

 $\bullet$ 

### HyperLOG<sup>®</sup> 30100X Active UWB DF Antenna - 380MHz - 10GHz

0000

Active	Yes	Connector	SMA (f)
Gain (max.)	45 dBi	SKU#	201/027

#### HyperLOG<sup>®</sup> 30200X

Active UWB DF Antenna - 380MHz - 20GHz			0000		
Active	Yes		Connector	SMA (f)	
Gain (max.)	21 dBi		SKU#	201/028	

rectional antennas that nevertheless meet the highest require- shipping and is equipped with a high-quality gold coating, a highments. The HyperLOG<sup>®</sup> X series supports a wide frequency tech antenna housing (radome) to protect against mechanical range from 380 MHz to 20 GHz.

This means that the antennas can be used for measuring (ac- nector and an SMA connector with over-rotation protection. tive) radar, cellular radio, Wi-Fi, Bluetooth, etc. Each HyperLOG®

With the HyperLOG<sup>®</sup> X series, Aaronia offers low-cost active di- antenna undergoes rigorous testing in our laboratories before damage and environmental influences, an integrated tripod con-

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### HyperLOG<sup>®</sup> EMI Antennas

#### HyperLOG<sup>®</sup> 20300 EMI

h Performance EMC Antenna - 20MHz - 3GHz 🛛 🔍 🔍 🔿

Active	No	I	Mount	Tripod adapter
Gain (max.)	8 dBi	ſ	Dimensions	130x117x59.5 cm
Connector	N (f)		SKU#	201/035

#### HyperLOG<sup>®</sup> 20600 EMI igh Performance EMC Antenna - 20MHz - 6GHz 🛛 🔵 🔵 🔾

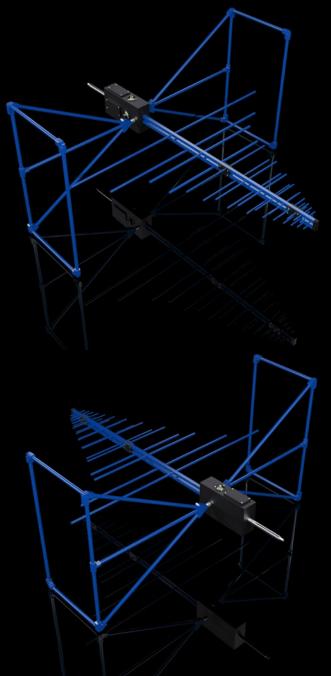
Active	No	Mount	Tripod adapter
Gain (max.)	8 dBi	Dimensions	130x117x59.5 cm
Connector	N (f)	SKU#	201/036

ate EMC/EMI pre-compliance test antenna for the pro user. By using the HyperLOG<sup>®</sup> EMI antennas, the common EMI and y range. Meets latest EMC standards up to 6 GHz.

and meets all needs for the latest EMC standards which since the measuring time is reduced drastically. expanded to 6GHz since 2011. Combines the advantages therefore can even be used as reference antenna.

atched ultra high accuracy. Very high gain over the full fre- EMC measurement error-rates, which show up by switching between different test antennas, are avoided. This is because you have only to use one antenna for the complete frequency range HyperLOG<sup>®</sup> 20600 EMI is Aaronias latest antenna develop- instead of two ore more antennas. This saves significant costs

biconical antenna and those of a log periodic antenna in The HyperLOG<sup>®</sup> EMI series can also be used as a powerful gle high end EMC/EMI antenna. Offers an extremely high broadcasting antenna with up to 310 watts. These antennas are racy of 0.3 dB over the full specified frequency range and suitable even for immunity measurements, where very high field strengths are needed by more than 10 V/m.



### IsoLOG<sup>®</sup> 3D Mobile PRO

The IsoLOG<sup>®</sup> 3D Mobile PRO is an ultra light and small isotropic antenna which is compatible to any spectrum analyzer. It just works on the fly and is a perfect plug and play solution for 3D measurements in limited time frames.

The antenna requires no software installation, no power connection and no hardware changes. It is connectable via the N (female or male) connector to any analyzer or oscilloscope. Each IsoLOG® 3D Mobile PRO includes an internal, rechargeable battery, offering a run-time of up to 6 hours, and two switchable low noise bypass preamplifiers.

The integrated amp allows measurements of very small signals. Thus, used in bypass mode, the antenna is still usable for high fieldstrengths.

The control of the antenna is done via USB or via manual antenna selection mode, requiring no USB connection. Aaronia also integrated an ultra fast 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 50kHz. This feature transforms the IsoLOG<sup>®</sup> 3D Mobile into a fully functional 3D antenna without the need of any USB software control.

Shipped in a waterproof transport-case, accompanied with a pistol grip with tripod functionality, the scope of delivery leaves nothing to be desired.



#### Suited for: Suited for: Structure St



#### IsoLOG<sup>®</sup> 3D Mobile 9030 PRO 9kHz - 3GHz

Design

Active

Gain (max.)

Connector

Dimensions

lount

Neight

SKU#

#### $\bigcirc \bigcirc \bigcirc$

otropic	•Worlds first 9 kHz to 3 G				
	portable isotropic 3D antenna				
es	Suitable for any spectr				
5 dBi	analyzer				
l (f, opt. m)	<ul> <li>High gain and low noise</li> </ul>				
	<ul> <li>Two built-in bypass preampli</li> </ul>				
/4" thread	Manual or automatic axis swi				
15x70x70 mm	Battery or DC powered				
50 g	Pistol grip with tripod functi				
JU Y	ality included				
07/004	Waterproof transport case				

### IsoLOG<sup>®</sup> 3D Mobile PRO



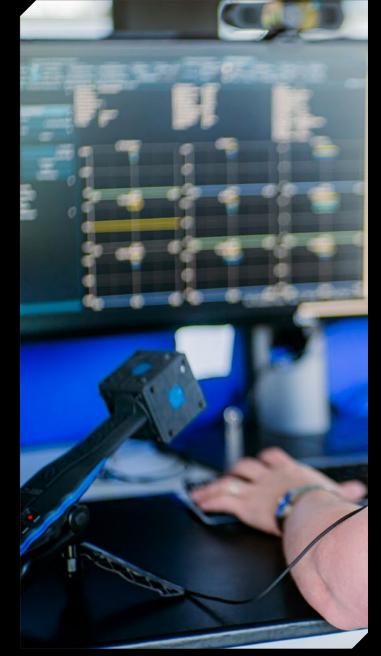
#### IsoLOG<sup>®</sup> 3D Mobile 9060 PRO 9kHz - 6GHz $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$

	Isotropic
	Yes
nax.)	20 dBi
ctor	N (f, opt. m)
	1/4" thread
sions	315x70x70 mm
	350 g
	207/005

- Worlds first 9 kHz to 6 GHz portable isotropic 3D antenna Suitable for any spectrum analyzer High gain and low noise • Two built-in bypass preamplifier Manual or automatic axis switch Battery or DC powered · Pistol grip with tripod functionality included
- Waterproof transport case

#### IsoLOG<sup>®</sup> 3D Mobile 9080 PRO 9kHz - 8GHz $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$

- Isotropic Design Gain (max.) 22 dBi Connector N (f. opt. m) Mount 1/4" thread Dimensions 315x70x70 mm 350 g Weight
- Worlds first 9 kHz to 8 GHz portable isotropic 3D antenna • Suitable for any spectrum analyzer
  - High gain and low noise
  - Two built-in bypass preamplifier
  - Manual or automatic axis switch Battery or DC powered
  - Pistol grip with tripod functionality included
  - Waterproof transport case



### DF Tracking Antenna-Arrays

T 3D RF-TRACKING-APP

sector array and is protected by a included radom which can only vertically polarized antennas. be ordered in any color and optional prints. The radom is wa- The IsoLOG® 3D DF only needs a power source and an Ethernet tertight, shock- and heat-proofed to widthstand even hardest connection for easy integration and control over any existing conditions.

Real-time RF direction finding including elevation and altitude.

0LOG <sup>®</sup> 3D DF 80 DF Tracking Antenna - 400MHz - 8GHz •••••					
tive	Yes	Antennas	16		
in (max.)	60 dBi	Accuracy	4 to 6°		
nnector	N (f)	Mount	Truss / Tripod		
vitch Time	20 ms / 8 µs	Dimensions	960x960x380 mm		
ctors	8	SKU#	207/001		

3D DF Tracking Antenna - 400MHz - 8GHz			
Active	Yes	Antennas	32
Gain (max.)	60 dBi	Accuracy	1 to 3°
Connector	N (f)	Mount	Truss / Tripod
Switch Time	20 ms / 8 µs	Dimensions	960x960x380 mm
Sectors	16	SKU#	201/002

# for tracking flying transmitters e.g. drones or airplanes.

transmitter (all directions/altitude and frequencies at the same test cars) and for hidden operations. time). And finally our latest development, an ultra high dynamic more km) without cable loss.

Aaronia's new patented 3D RF Tracking Antenna IsoLOG<sup>®</sup> 3D With the "auto rotate-switch function" it can be used with any DF is the first and only DF antenna also offering the elevation spectrum analyzer brand. The IsoLOG<sup>®</sup> 3D DF is the perfect and altitude of any RF source! This makes it the perfect choice solution for counter-surveillance measurements or drone-detection-systems (UAV tracking).

In addition the IsoLOG<sup>®</sup> 3D DF offers the by far fastes track- The wide frequency range eliminates the typical need of variing speed of down to 8µS per sector on the market. This of- ous DF antenna set ups to save space and system cost. This fers a unique real time monitoring/tracking feature for ALL RF makes it usable for mounting on even small vehicles (e.g. drive

RF over Fiber solution, eliminates the need of signal damping Looking like a satellite dish for camping vans the IsoLOG<sup>®</sup> 3D RF cables, now offering an allmost unlimted cable length (10 or DF is not recognized as a tracking antenna. The IsoLOG<sup>®</sup> 3D DF is sensitive to the majority of incoming signal polarizations including all linear polarizations, allowing reliable detection of The IsoLOG<sup>®</sup> 3D DF consists of a high density, customizable signals including those invisible to most DF systems that use

network



### OmniLOG PRO Omnidirectional Antennas

Suited for. Suited for. Science States Science 
Passive antenna	Passive antenna	Passive antenna	Passive antenna
• 2 dBi gain (max.)	• 2 dBi gain (max.)	• 5 dBi gain (max.)	• 5 dBi gain (max.)
SMA (m) Connector	SMA (m) Connector	• N (f) Connector	• N (f) Connector
		16.18-0	
		• 252000	• 350 <sup>00////</sup>
		··· ·	• •
		• •	• •
OmniLOG <sup>®</sup> PRO 1030	OmniLOG <sup>®</sup> PRO 1030H	OmniLOG <sup>®</sup> PRO N 1030	OmniLOG® PRO N 1030H
1W Broadband Antenna - 150MHz - 3GHz	100W Transmit/Receive Antenna - 700MHz - 3GHz •••	1W Broadband Antenna - 150MHz - 3GHz	100W Transmit/Receive Antenna - 700MHz - 3GHz ••••
Connector Magnetic Base SKU# 202/004	Connector Magnetic Base SKU# 202/008	Connector Mounting Bracket SKU# 202/012	Connector Mounting Bracket SKU# 202/016
OmniLOG® PRO 1060	OmniLOG <sup>®</sup> PRO 1060H	OmniLOG <sup>®</sup> PRO N 1060	OmniLOG® PRO N 1060H
1W Broadband Antenna - 150MHz - 6GHz	100W Transmit/Receive Antenna - 700MHz - 6GHz • • • • •	1W Broadband Antenna - 150MHz - 6GHz	100W Transmit/Receive Antenna - 700MHz - 6GHz
Connector Magnetic Base SKU# 202/005	Connector Magnetic Base SKU# 202/009	Connector Mounting Bracket SKU# 202/013	Connector Mounting Bracket SKU# 202/017
OmniLOG <sup>®</sup> PRO 10100	OmniLOG <sup>®</sup> PRO 10100H	OmniLOG° PRO N 10100	OmniLOG <sup>®</sup> PRO N 10100H
1W Broadband Antenna - 150MHz - 10GHz 0000	100W Transmit/Receive Antenna - 700MHz - 10GHz 0000	1W Broadband Antenna - 150MHz - 10GHz 0000	100W Transmit/Receive Antenna - 700MHz - 10GHz
Connector Magnetic Base SKU# 202/006	Connector Magnetic Base SKU# 202/010	Connector Mounting Bracket SKU# 202/014	Connector Mounting Bracket SKU# 202/018
OmniLOG <sup>®</sup> PRO 10200	OmniLOG <sup>®</sup> PRO 10200H	OmniLOG <sup>®</sup> PRO N 10200	OmniLOG <sup>®</sup> PRO N 10200H
1W Broadband Antenna - 150MHz - 20GHz	100W Transmit/Receive Antenna - 700MHz - 20GHz 0000	1W Broadband Antenna - 150MHz - 20GHz	100W Transmit/Receive Antenna - 700MHz - 20GHz 000
Connector Magnetic Base SKU# 202/007	Connector Magnetic Base SKU# 202/011	Connector Mounting Bracket SKU# 202/015	Connector Mounting Bracket SKU# 202/019
The OmniLOG <sup>®</sup> PRO series offers high-power transmit & re-	an ultra-wideband receive antenna (1 W [CW]) and a 100 W	Bluetooth, WLAN). Each OmniLOG® PRO has an IP65-certified	
ceive antennas for spectrum monitoring and interference	high-power transmit & receive antenna (100 W [CW]). They cov-	outdoor-ready housing and undergoes rigorous testing, allow-	
hunting, including countermeasures. This series includes	er RF sources from VHF to K-band (e.g., radio, TV, mobile, DECT,	ing Aaronia to provide a 2-year warranty on all antennas.	

### OmniLOG PRO Omnidirectional Antennas

ommil log 30800





### 700MHz - 2.5GHz

Active	No
Gain (max.)	2 dBi
Connector	SMA (m)
Dimensions	210x20 mm
Weight	70 g
SKU#	202/001

#### • Excellent cost effective omni directional antenna • For radial isotropic measurements from 700MHz to 2.5 GHz •GSM (GSM900, GSM1800, GSM1900), UMTS and 2,4GHz WLAN

#### OmniLOG<sup>®</sup> 70600 680MHz - 6GHz

Active	No
Gain (max.)	2 dBi
Connector	SMA (m)
Dimensions	173x62 mm
Weight	54 g
SKU#	202/002

#### $\bullet \bullet \circ \circ$

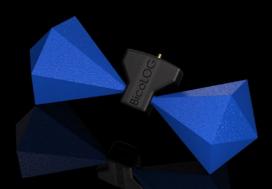
- Ultra-wideband antenna
- Advancement of the OmniLOG® 90200 with extended frequency range of 680 MHz - 6 GHz
- GSM, CDMA, LTE, WiFi, ISM, DECT, Bluetooth, 5GHz WLAN, WiMAX

#### OmniLOG<sup>®</sup> 30800 300MHz - 8GHz

Active	No	• (
Gain (max.)	2.5 dBi	• •
Connector	SMA (m)	r
Dimensions	173x62 mm	• (
Weight	54 g	L V
SKU#	202/002	

- Jltra-wideband antenna
- Advancement of the OmniLOG® 90200 with extended frequency range of 300 MHz - 8 GHz
- GSM, CDMA, LTE, WiFi, ISM, DECT, Bluetooth, 5GHz WLAN, NiMAX

# BicoLOG<sup>®</sup> Biconical Antennas



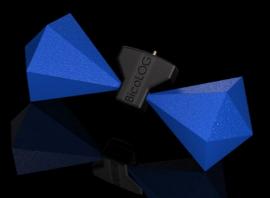
#### BicoLOG<sup>®</sup> 5070 EMC Measuring Antenna - 50MHz - 700MHz

Design	Biconical	Mount	1/4" thread
Active	No	Dimensions	350x160x140 mm
Gain (max.)	1 dBi	Weight	350 g
Connector	SMA (f)	SKU#	204/001



#### BicoLOG<sup>®</sup> 30100 EMC Measuring Antenna - 30MHz - 1GHz

Mount 1/4" thread Biconical Design Dimensions 350x160x140 mm Gain (max.) 1 dBi Weight 350 g Connector SMA (f) SKU# 204/002



### BicoLOG<sup>®</sup> 20100

Design

Active

Gain (max

Connector

EMC Measuring Antenna - 20MHz - 1GHz

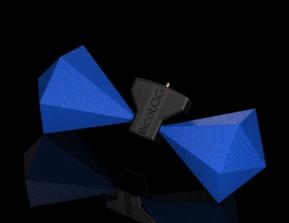
Bi	С	C
ΕM	IC	

Biconical	Mount	1/4" thread
No	Dimensions	350x160x140 mm
1 dBi	Weight	350 g
SMA (f)	SKU#	204/003

ries are very lightweight and therefore ideal for portable mea- struments with an N connector can be connected via our op- Software MCS, so that fast and professional measurements are surement devices in addition to use in the laboratory. Each tional adapter. When using our high-sensitivity HF-60100 V4 possible right from the start. BicoLOG<sup>®</sup> has a high-quality SMA connector and can therefore Spectrum Analyzer with preamplifier, all necessary calibration

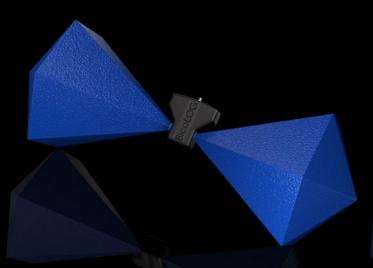
The high-quality measurement antennas of the BicoLOG<sup>®</sup> se- be connected immediately to many spectrum analyzers. In- data is already provided automatically in the Spectrum Analyzer

### BicoLOG<sup>®</sup> Biconical Antennas



#### OG<sup>®</sup> 20300 uring Antenna - 20MHz - 3GHz

	Biconical	Mount	1/4" thread
	No	Dimensions	350x160x140 mm
max.)	1 dBi	Weight	350 g
ctor	SMA (f)	SKU#	204/004



#### BicoLOG<sup>®</sup> 30100E

EMC High Performance Antenna - 30MHz - 1GHz

Design	Biconical	Mount	1/4" thread
Active	No	Dimensions	540x225x225 mm
Gain (max.)	0 dBi	Weight	1150 g
Connector	SMA (f)	SKU#	204/005

#### BicoLOG<sup>®</sup> 20100E

EMC High Performance Antenna - 20MHz - 1GHz

Design	Biconical	Mount	1/4" thread
Active	No	Dimensions	540x225x225 mm
Gain (max.)	0 dBi	Weight	1150 g
Connector	SMA (f)	SKU#	204/006

# BicoLOG<sup>®</sup> Biconical Antennas



#### BicoLOG<sup>®</sup> 5070X Active EMC Measuring Antenna - 50MHz - 700MHz

Design	Biconical	Mount	1/4" thread
Active	Yes	Dimensions	350x160x140 mm
Gain (max.)	41 dBi	Weight	500 g
Connector	SMA (f)	SKU#	204/007



#### BicoLOG<sup>®</sup> 30100X

Active EMC Measuring Antenna - 30MHz - 1GHz 🛛 🛛 🔴 🔴

Design	Biconical	Mount	1/4" thread
Active	Yes	Dimensions	350x160x140 mm
Gain (max.)	41 dBi	Weight	500 g
Connector	SMA (f)	SKU#	204/008



#### BicoLOG<sup>®</sup> 20100X

Active EMC Measuring Antenna - 20MHz - 1GHz 🛛 🔍 🌖

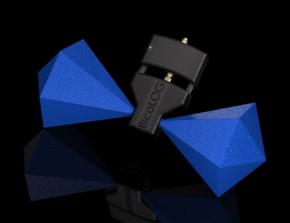
Design	Biconical	Mount	1/4" thread
Active	Yes	Dimensions	350x160x140 mm
Gain (max.)	41 dBi	Weight	500 g
Connector	SMA (f)	SKU#	204/009

X series are very lightweight and therefore, in addition to the use alyzers. Instruments with an N-connector can be connected via Software MCS, enabling fast and professional measurements in the laboratory, also ideally suited for portable measurement our optional adapter. When using our high-sensitivity HF-60100 right from the start.

devices. Each BicoLOG® X has a high quality SMA connector and V4 Spectrum Analyzer with Preamplifier, all required calibration

The high-quality active measurement antennas of the BicoLOG<sup>®</sup> can therefore be connected immediately to many spectrum an- data is already provided automatically in the Spectrum Analyzer

### BicoLOG<sup>®</sup> Biconical Antennas



#### BicoLOG<sup>®</sup> 20300X Active EMC Measuring Antenna - 20MHz - 3GHz

	Biconical	Mount	1/4" thread
	Yes	Dimensions	350x160x140 mm
max.)	41 dBi	Weight	500 g
ector	SMA (f)	SKU#	204/010

### BicoLOG<sup>®</sup> 30100E X

Active High Power Antenna - 30MHz - 1GHz

Design	Biconical	Mount	1/4" thread
Active	Yes	Dimensions	350x160x140 mm
Gain (max.)	41 dBi	Weight	1300 g
Connector	SMA (f)	SKU#	204/011

#### BicoLOG<sup>®</sup> 20100E X

Active High Power Antenna - 20MHz - 1GHz

Design	Biconical	Mount	1/4" thread
Active	Yes	Dimensions	350x160x140 mm
Gain (max.)	41 dBi	Weight	1300 g
Connector	SMA (f)	SKU#	204/013

# LF/HF Preamplifiers

cially when measuring extremely weak signals. They are es- series offers the best possible performance when measuring sential for EMC and pre-compliance measurements, e.g. ac- weak signals in the frequency range of 1 Hz - 30 MHz.

The UBBV-HF series enables maximum performance, espe- cording to EN55011, EN55022, EN50371 etc. The UBBV-NF

Suited for. 🔵 ECO 🛛 PLUS 😑 5G 🔵 XPLORER | 🔵 Ideal choice 📿 Limited usage

Ultra Low Noise - 9kHz - 6GHz									
Frequency range	9kHz - 6GHz		Impedance	50 Ohm					
Noise	0.4 dB (typ.)		Connector IN	SMA (f)					
Gain	22 dB (typ.)		Connector OUT	SMA (m)					
Max. input	+10 dBm		Weight	146g					
Max. Output	+8 dBm		SKU#	302/002					

22dB Preamn LIBB\/ 0910

#### 23dB Preamp UBBV 1060 BPA Low Noise Bypass - 100MHz - 6GHz $\bullet \bullet \circ \circ$

Frequency range	100MHz - 6GHz	Impedance	50 Ohm
Noise	1.4 dB (typ.)	Connector IN	SMA (f)
Gain	23 dB (typ.)	Connector OUT	SMA (m)
IP3 (bypass)	+48 dBm (typ.)	Weight	146g
Max. Output	+21 dBm	SKU#	302/001

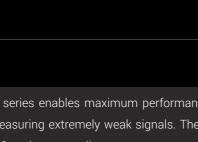
250B Preamp OBBV-INF 25 IHz-50MHz 00								
Frequency range	1Hz - 50MHz		Max. Output	+15 dBm				
Gain	25 dB (typ.)		Connector IN	SMA (f)				
Max. DC	10 VDC		Connector OUT	SMA (m)				
Max. AC	3V or 2.1V rms		Weight	146g				
			SKU#	301/001				

OED Droom LIDDV/ NE OE









### LF/HF Preamplifiers

ed directly on all SPECTRAN® handheld devices, but can also be used fore even be used with the antennas of the MagnoTRACKER® series or with spectrum analyzers and antennas from other manufacturers with- other, regular 50 Ohm devices. This preamplifier is already considered out any problems. For the best possible performance of an EN55011, and calibrated in our Spectrum Analyzer Software "MCS". It offers a EN55022 or EN50371 EMC measurement. The UBBV-HF preamplifier continuous linear gain of up to 35dB. The UBBV-NF can be operated is already considered and calibrated in our spectrum analysis software via internal rechargeable battery (runtime approx. 3-4 hours) or via the "MCS". It offers a significant performance gain especially in the lower supplied power supply. frequency range up to 1GHz.

The UBBV-HF ultra-high gain broadband preamplifiers can be mount- The UBBV-NF series offers a high impedance signal input and can there-

5dВ F z - <b>зом</b> н		UBBV-1	NF 35 00	40dB E 1MHz to 1GI		eamp U	BBV1 •00	40dB [ 1MHz to 10		rear	mp Ul	BBV2 0000	RF		UB	BV DC2	20 0000	
equency nge	1Hz - 30MHz	Max. Output	+10 dBm	Frequency range	1MHz to 1GHz	Impedance	50 Ohm	Frequency range	1MHz to 10GHz	lm	pedance	50 Ohm	Frequenc range	DC to 20GHz		Impedance	50 Ohm	fiers
iin	35 dB (typ.)	Connector IN	SMA (f)	Noise (typ.)	3.5 dB	Connector IN	SMA (f)	Noise (typ.)	3.5 dB	Со	onnector IN	SMA (f)	Noise (ty	.) 2.5 dB		Connector IN	SMA (f)	Preamplif
ax. DC	10 VDC	Connector OUT	SMA (m)	Gain (typ.)	40 dB	Connector OUT	SMA (m)	Gain (typ.)	40 dB	Coi OU	onnector JT	SMA (m)	Gain (typ	14 dB		Connector OUT	SMA (m)	
ax. AC	3V or 2.1V rms	Weight	146g	Max. input	+15 dBm	Weight	146g	Max. input	+15 dBm	We	eight	146g	Max. inpu	: +15 dB	n	Weight	146g	
		SKU#	301/002	Max. Output	+15 dBm	SKU#	302/004	Max. Output	+15 dBm	SKI	(U#	302/005	Max. Out	ut +15 dB	m	SKU#	303/001	

### AARTOS<sup>™</sup> Drone Detection System







- Detection range up to 50 km
- Portable and stationary variants Powerful software Made in Germany





World's most successful drone detection system

After five years of development, Aaronia is introducing its latest drone detection system – the AARTOS<sup>™</sup> DDS Generation 6. Designed to detect intruding drones, the system is based on real-time directional measurements of a drone's electromagnetic emissions (including its remote control). AARTOS™ DDS users receive accurate warnings and alerts about incoming drones. Our system's detection range far exceeds that of its targets. Under normal circumstances, the detection

range is equal to (or longer than) the maximum distance between the operator and the drone, depending on the transmitter power of the drone and/or its operator. Taking into account factors such as drone type and topography, the range of the AARTOS<sup>™</sup> DDS can reach 50 km or more.

Aaronia's drone detection system can be used virtually anywhere. The AARTOS<sup>™</sup> has proven itself in protection of borders, sports events or concerts, residential areas, government facilities as well as commercial or industrial sites such as nuclear plants. Available as a single-site or multiple-site solution, the system can be adjusted to the characteristics of the respective terrain to be monitored.

AARTOS<sup>™</sup> is based on our IsoLOG<sup>®</sup> 3D DF antenna, real-time spectrum analyzers and a special software plug-in for the RTSA-Suite PRO software. Combining all these elements allows for 24/7 monitoring, recording, and uninterrupted data streaming. The system is also both compact and flexible, allowing it to be set up in virtually any environment it is needed.



### (•) DETECT

### 

 Real-time AI and 3D DF monitoring Localizes drones and pilots • Fully automatic mode possible Optional with radar and cameras

### COUNTER

• Drone jamming up to 10 km range • Seamless frequency range, selectively from 400 MHz to 6 GHz Portable or stationary



### AARTOS<sup>™</sup> Drone Detection System



Typical range: 2-5 km









The AARTOS<sup>™</sup> X2 is a low-cost and mobile drone detection system

with a long range of up to 5 km (stationary up to 30 km), capable of

An indispensable tool for protecting against drone threats, e.g. at

decoding drone logs and pinpointing their location.



The AARTOS™ X5 is also only available in mobile configuration. (V6 The AARTOS™ X7 offers an increased range and accuracy and can and is a cost-effective solution in situations that require detection It is quickly deployable and has the ability to record and replay data. 2 km.

MIL). The X5 include the IsoLOG® 3D DF antenna with 8 sectors be easily upgraded with additional components. as well as positioning. Drones are detected within a range of 1 to Real-time triangulation of all targets can be achieved by intercon-

necting multiple X7 systems. An additional independent receiver will improve the frequency coverage even further. The IsoLOG® 3D DF antenna increases the X7's detection range to 2 to 5 km.

For more information and detailed specifications please visit www.drone-detection-system.com

X

crowds or events.

### AARTOS<sup>™</sup> Drone Detection System



additionally offers seamless ultra-wideband monitoring with 4+ independent receivers and an optimized amplifier group.

The X9 traverses the entire frequency range more than 1000! times per second. With an enormous range of up to 14 km (or much more by scaling multiple AARTOS<sup>™</sup> X9 systems), the AARTOS<sup>™</sup> X9 is perfect for the monitoring of large areas. The system has already proven itself at international airports such as Heathrow and Muscat.

The AARTOS<sup>™</sup> X9 operates with the same precision as the X7, but Our AARTOS<sup>™</sup> programmable jammer delivers a gapless coverage from 400 MHz to 6 GHz with an effective jamming range of 10 km. With its directional antennas it is able to cover all commercial and dar can determine and display the exact position, flight direction, military drones up to 6 GHz and can counter them with a freely adjustable output power of 30W per sector (upgradeable to 100W).

> ates a system that can reliably and quickly locate and neutralize maximum output power of 1300W the jammer is capable of countering drones within the most common frequency bands (430 MHz, as explosives. 1.6 GHz, 2.4 GHz and 5.8 GHz).

AARTOS<sup>™</sup> offers a wide range of radars to accommodate any customer requests (low range, low cost or high end, 3D). AARTOS™ Ra-

Our AARTOS<sup>™</sup> Cam is a fully integrated, optical, and thermal solu-The stationary jammer has a jamming range of up to 8 km, it credetection mechanisms of the AARTOS™ system. It enables the user threats. With its directional and omnidirectional antennas and a to visually spot detected drones, even from large distances, and identify potentially dangerous payloads attached to the drone, such

### RTSA-Suite PRO



RTSA Suite PRO is the world's fastest real-time spectrum analysis software on the market and was developed specifically for our latest SPEC-TRAN<sup>®</sup> real-time instruments.

It allows various hardware components to be integrated and used for evaluation.

A simple configuration via blocks in the software allows optimal settings for almost all measurement scenarios. Already with the standard free basic blocks (worth more than 7000 Euro) of the RTSA-Suite PRO you are prepared for most tasks.

Included are among others: An HTTP Server and Client, the AM/FM Demodulator, Sweep Zoom, Filewriter/reader and the 32k FFT feature

- · Gapless real-time 3D view
- · Unlimited recording time
- · Supports multiple devices simultaneously Real-time demodulation
- Intelligent, real-time 3D TRIGGER
- · Fully automatic pulse classification (decodes Wifi, BT, GSM, DECT, QPSK, QAM etc.)
- · Graphics card (GPU) support
- · Low system requirements
- · USB 2.0 and 3.0 support
- · Up to 20 GHz real-time bandwidth
- · Full MATLAB support
- Almost limitless measurement scenarios con-
- figurable through innovative block system





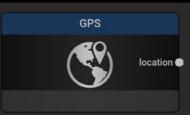


#122/029 Devices Allows the usage and configuration of a separate Tektronix RSA USB Analyzer.

### RTSA-Suite PRO Optional Software Blocks

**GNSS** Compass

#122/039 Devices Allows the usage of an external dual GNSS satellite navigation system for position, direction and tilt information.



#122/004 Devices The GPS block offers the possibility to read the GPS data from a GPS device.



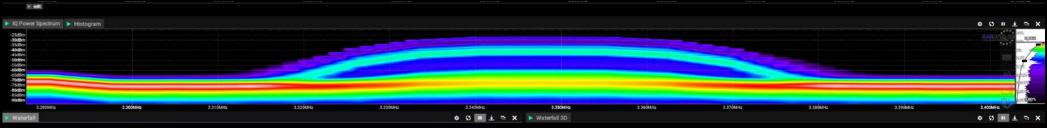
#122/007 Devices Device control for the Rohde 8 Schwarz NRP-Z power sensor fam-



#122/008 Devices Device control for the Rohde & Schwarz NRQ6 frequency selective power sensor.



#122/028 Devices The RF SP4T Switch block can be used as a stand alone or within a mission.



#122/043 IQ Processing Analyzes the IQ spectrum and will add an antenna sync information to it based on some advanced algorithm.



#122/051 IQ Processing Converts I/Q data in real-time to SPECTRA using an highly optimized double precision 64Bit FFT algorithm.



#122/017 IQ Processing Offers a fully automatic digital signal burst/pulse classification and demodulation/decoder.



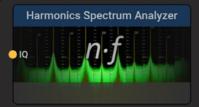
#122/019 Measurement Generates the channel stream for the Category Timeline, Category Bars and Category Histogram blocks.

DEVELOPED & MANUFACTURED IN GERMANY

### RTSA-Suite PRO Optional Software Blocks



#122/020 Measurement View Shows up to 16 waterfall displays within a single view.



#122/005 Measurement View The block offers a real-time harmonics and THD (in dBc and percentage) measurement based on IQ data.



#122/006 Measurement View The Intermodulation Analyzer block offers a real-time IP3 (TOI) measurement.

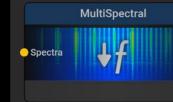


#122/049 Measurement View The IQ Power Statistics block of fers a real-time PDF, CDF, CCDF & Relative CCDF statistical RF power measurement.



#122/020 Measurement View The Multi Waterfall block (Grid Spectrogram) shows up to 8 waterfalls within a single view.





#122/022 Measurement View Shows all fundamentals and har monics within the frequency spectrum e.g. from pulsed or frequency modulated signals.



#122/022 Measurement View Shows the fundamentals and harmonics from all pulsed or frequency modulated signals within the frequency spectrum at a glance in 3D.

#122/022 Measurement View Identify the duration of any signal within the frequency spectrum live at a glance.

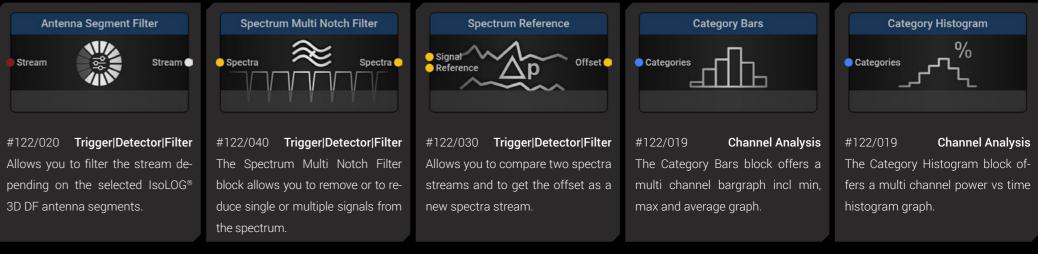


#122/022 Measurement View Identify the duration of any signal within the frequency spectrum live at a glance.



#122/020 Trigger|Detector|Filter

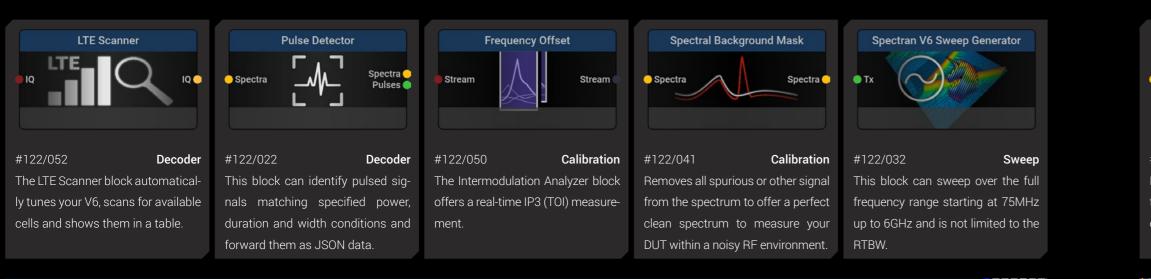
### RTSA-Suite PRO Optional Software Blocks

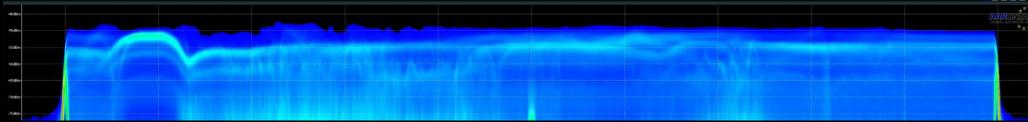




Decoder

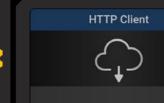
### RTSA-Suite PRO Optional Software Blocks





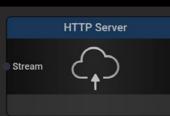


#122/038 Sweep This block offers an impressive tracking generator, e.g. for rejection measurement of a DUT.



#122/013 In / Out This block in combination with the HTTP Server block can handle any data format (I/Q, SPECTRA, Video etc.) within the RTSA-Suite PRO.

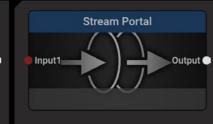
Stream



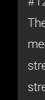
#122/012 In / Out This block in combination with the HTTP Client block can handle any data format (I/Q, SPECTRA, Video etc.) within the RTSA-Suite PRO.



#122/015 In / Out Multi Stream Logger Block allows to merge and store up to 16 streams (IQ and/or Spectra).



#122/042 In / Out Local machine stream IO (similar to the HTTP block) but is much more efficient and includes an adjustable buffer for time critical missions.



• O Main • Traces Timing

# RTSA-Suite PRO Optional Software Blocks

**Channel Power Measurement** Spectra

#122/002 Control Measures the ratio of power between the main channel and those channels around the main channel



#122/003 Control Changes the center frequency and span of an additional SPECTRAN® V6 RSA according to the cursor of the first SPECTRAN<sup>®</sup> V6 RSA.



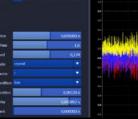
#122/046 Control Provides a TCP/IP server interface with a SCPI command set to control a RTSA-Suite PRO Mission remotely.

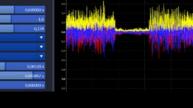


#122/037 Control Consists of up to 32 individual frequency band setups which can be run as a batch sequence over and over again.

Short Burst Suppression Filter Spectra Spectra 

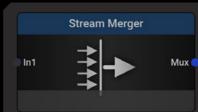
#122/001 Control The Short Burst Suppression Filter attempts to suppress short pulses from an incoming spectra stream



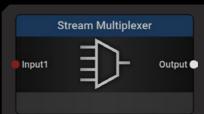




22/0	131					Control	
e (	Spec	tru	m	St	itcher	block	
rges	s/stit	che	S	mul	tiple	spectra	
eam	s to	а	si	ngle	new	spectra	
eam							



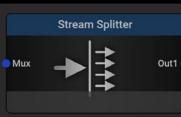
#122/023 Control The Stream Merger block merges up to 16 data stream of any type to a single mixed stream.



Control

#122/016

This block switches/selects from multiple sources (even different data formats e.g. IQ, video, spectra are supported).



2048

#122/034

The Stream Splitter block splits the output of the Stream Merger block back to the original streams.

#### Control



Spectra

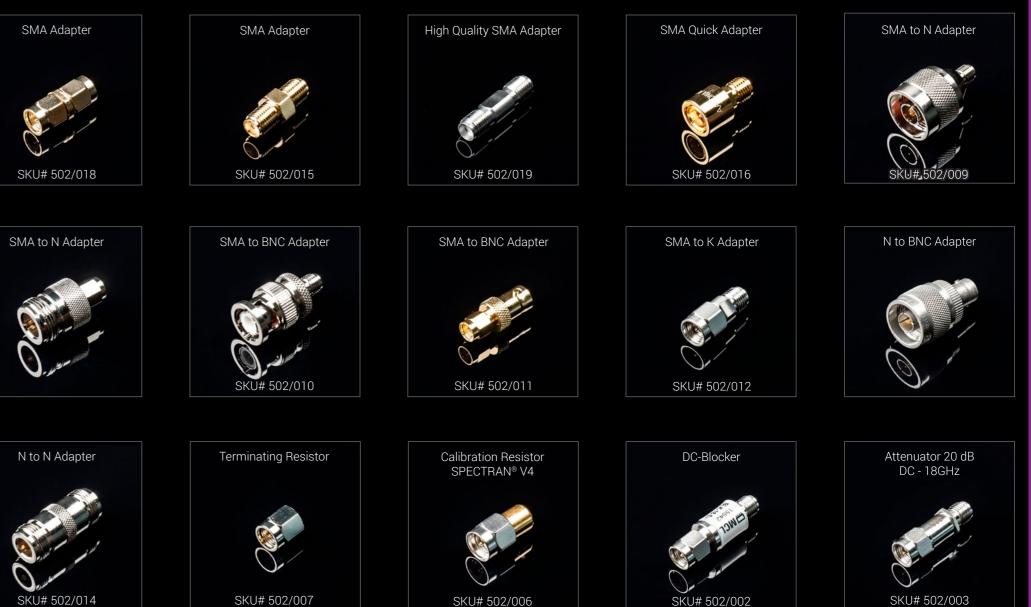
Master Application The IsoLOG<sup>®</sup> Directional Finding block shows you the direction of any selected RF signal(s) in real-time and high accuracy on a map.

IsoLOG Directional Finding

### RTSA-Suite PRO Optional Software Blocks



# Adapters | Attenuators | DC-Blockers | Resistors



### Accessories



Heavy Pistol Grip with polarization-change-function

This highly stable multi-function pistol grip offers a variety of functions and should not be missing in any professional measurement! Specifically, it is strongly recommended for the use of larger antennas like the HyperLOG<sup>®</sup> 30xxx and 40xx series. With a single push of a button, the plane of polarization can be set to 45 and 90 degrees. The antenna is supported by a high-quality spring-head rotation in any direction. With the quick release plate a fast exchange of multiple antennas is possible.

The ball mount allows perfect and quick orientation on a tripod stand. The tripod mount is available in 1/4 "or 3/8" size. SKU# 503/012

### **GPS** Logger

with Gyro & Tiltsensor, compass and accelerometer

The Aaronia GPS Logger includes a total of 6 sensors, all of them on the cutting edge of technology, making it the world's first stand-alone data logger with such a variety of sensors. Not to forget is also the very small form factor and the extremely high data rate of approx. 35 logs/second (freely adjustable). The logger with battery weighs just 88 grams

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---

- · 165 dBm and accuracy of 1.8 m (CEP95)
- · 3D compass with 1-2 degree precision

· 3D/triaxial acceleration sensor with up to 4 mg resolution

- $\cdot$  3D/triaxial gyro / tilt sensor with a sensitivity of 14 LSBs/s
- · Altimeter / pressure sensor with a wide pressure range of 260 to 1260mbar and a height resolution of up to 20cm SKU# 503/035



Spherical Compass For mounting on HyperLOG® antennas Works in any position of the antenna due to the sphere filled with liquid. Includes connector and all necessary screws. SKU# 503/001

Heavy Tripod for IsoLÓG<sup>®</sup> 3D / HyperLOG<sup>®</sup> EMI antennas SKU# 503/013

### Accessories

Heavy Elevating Tripod for IsoLOG<sup>®</sup> 3D / HyperLOG<sup>®</sup> EMI antennas

SKU# 503/014

Compact Aluminum Tripod Height adjustable, high stability SKU# 503/057



for MagnoTRACKER / PowerLOG<sup>®</sup> antennas SKU# 503/016



### Miniature Tripod

For Aaronia antennas and handheld analyzers

Turns any HyperLOG® or BicoLOG® antenna into a tabletop unit. Can also be converted to a practical pistol grip in a few simple steps. Fits also on Spectran<sup>®</sup> V4 & NF Spectrum Analyzers. 1/4" tripod connector. SKU# 503/010







#### SPECTRAN<sup>®</sup> V6 Mounting Plate Vertical version

Dimensions	000x000x00 mm	SKU#	000/000

Coated aluminum mounting plates for attaching two SPEC-TRAN<sup>®</sup> V6 form factor units in a vertical position. Very compact and sturdy connection especially made for outdoor usage.

Fits all current V6 analyzers, signal generators, splitters, couplers, RFoF units and the powerbank. Mounting rods and screws are included.

SPECTRAN<sup>®</sup> V6 Mounting Plate Horizontal version

Dimensions 000x000x00 mm SKU# 000/000

PB 26800X PC New (C 1000)

Coated aluminum mounting plates for attaching two SPEC-TRAN® V6 form factor units in a horizontal position. Very compact and sturdy connection especially made for outdoor usage.

Fits all current V6 analyzers, signal generators, splitters, couplers, RFoF units and the powerbank. Mounting rods and screws are included.

Precision Torque Wrench For Aaronia analyzers, antennas and accessories as well as 3rd party products

Precision Torque Wrench for Aaronia analyzers, antennas and accessories as well as 3rd party products with 3.5mm, 2.92mm for correct mounting and reproducible measurement:

· 2.4mm, 1.85mm and SMA connectors · 5/16" wrench size · 0.9 N.m. torque SKU# 503/061

### Accessories



### 2.4 GHz Bandpass Filter Frequencies between 2400 MHz and 2500 MHz

dance	50 Ohm	Power Handling CW	≤10W
er Frequency	2450MHz	Peak Instantaneous	≤50 W
band	2400 to 2500MHz	Connectors	SMA (f)
ion Loss	<1dB	SKU#	502/004



5.8 GHz Bandpass Filter Frequencies between 5150 MHz and 5850 MHz

ow	Impedance	50 Ohm	Power Handling CW	≤10W
0 W	Center Frequency	5500MHz	Peak Instantaneous	≤50 W
ЛА (f)	Passband	5150 to 5850MHz	Connectors	SMA (f)
2/004	Insertion Loss	<1dB	SKU#	502/005

AARONIA AG in coshes. Adapter Filers / Resolution Deltamon / Owngers Topols N martin N martin N martin Max 0 Middle Max 0 Middle E Associat 
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 Please visit www.aaronia.com for our complete accessories lineup including outdoor cases, a vast assortment of connection cables, tripods and much more.

## Shielding Chambers

Thanks to the special weaving technique, the Aaronia canopy systems are characterized by a high shielding performance in the low to high GHz range and can also shield low-frequency electrical fields.

This requires grounding of the system, which can be done easily and uncomplicatedly with the grounding package supplied with the matching floor mat. Responsible for the very good shielding effect is a complex fabric concept based on a patented silver/polyamide special fiber.

Aaronia canopies are air-permeable and the optics are highly transparent and translucent. The silver/polyamide special fiber ensures good air exchange. The material is antiseptic and therefore extremely allergy-friendly.

It is always recommended to purchase canopies as a system, i.e. a canopy with a matching floor mat. Since our shielding fabric reflects incoming radiation, a Faraday cage should always be created to shield high-frequency signals. This can be achieved relatively easily with our canopies and floor mats.

Canopies made of Aaronia-Shield<sup>®</sup> do not need to be grounded for high-frequency shielding. However, we generally recommend grounding in connection with the respective shielding mat, since this shields low-frequency electrical fields from power lines, high-voltage lines, etc., on the one hand, and for safety reasons on the other hand, since the materials are electrically conductive and can become statically charged.

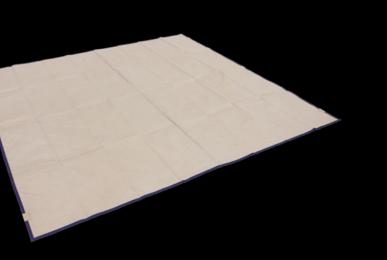


#### 50dB Pyramid Shielding Chamber L: 1.2 x 2.4 x 2.35 m XL: 2.4 x 2.4 x 2.35m

- Bendable, foldable, lightweight and portable
  Easy installation and handling
  Breathable, extremely air permeable
  Highly transparent, washable, antibacterial
- Braiding material: silver/polyamide blend
  Shielding performance static fields: 99.99% to 99.999% (only WITH grounding!)
  Shielding performance low-frequency, electric fields: 99.99% to 99.999% (only WITH grounding!)
  Shielding performance high-frequency fields: 43dB (99.992%) at 10GHz or 50dB (99.999%) at 1GHz (also WITHOUT grounding)

# 5OdB Cube Shielding Chamber L: 1.2 x 2.4 x 2.2 m XL: 2.4 x 2.2 m XXL: 3.2 x 2.4 x 2.2 m Bendable, foldable, lightweight and portable Easy installation and handling Breathable, extremely air permeable Highly transparent, washable, antibacterial Braiding material: silver/polyamide blend Shielding performance static fields: 99.99% to 99.999% (only WITH grounding!) Shielding performance low-frequency, electric fields: 99.99% to 99.999% (only WITH grounding!) Shielding performance high-frequency fields: 43dB (99.992%) at 10GHz or 50dB (99.999%) at 1GHz (also WITHOUT grounding)

### Shielding Materials



#### 100dB shielding mat with grounding L: 135 x 245 cm XL: 260 x 250 cm XXL: 350 x 250 cm

In order to also shield the floor area of the mobile shielding chambers, matching shielding mats made of Aaronia X-Dream<sup>®</sup> have been developed, which are simply placed under the shield-ing chamber.

This creates a uniform overall shielding system to provide comprehensive complete protection in the floor area as well.

Two different grounding cables are included in the delivery of the shielding mat: a shielding cable for the connection with a radiator or similar and, if no radiator is available, a cable for the direct connection with the grounding of the socket.



### 100dB RF shielding fabric X-Dream $(1m^2) / X$ -Dream $(1m^2) / X$ -Dre

Aaronia's novel, patented EMC & RF Shielding-Fleece Aaronia X-Dream<sup>®</sup> offers an impressive RF shielding performance of far more than 100dB.

Highest RF screening performance even in the high GHz range. Probably offers the best rf and emc screening worldwide in this product and price category! Optimal for RF shielding-application in indoor as well as outdoor areas of homes, offices, laboratories and manufacturing.

Also ideal for building bug-proof environments, precision EMC measurement chambers, or shielding-application in aerospace. This product shields a 10000fold higher performance than Aaronia-Shield<sup>®</sup>.



#### 80dB RF shielding fabric Aaronia X-Steel (0,25m<sup>2</sup>)

Aaronias latest high end EMC screening Aaronia X-Steel. Made from 100% stainless steel fibre.

Meets any industrial or military standard. Almost impossible to destroy. Very temperature stable for at least 600 degrees Celsius, does not rot, permeable to air. Perfectly suitable for EMC screening of air entrances, very high protective EMC clothings etc.

Protects against any kind of RF field just like Aaronia Shield<sup>®</sup>, but offers a 1000 fold better shielding-performance and protection especially in the very high GHz range. Aaronia X-Steel offers the worlds highest screening within the air permeable EMC screening materials.

### Shielding Materials



#### 50dB RF shielding fabric Aaronia Shield (1m²)

Aaronia's novel EMC and RF Shielding-Fabrics Aaronia Shield® is made from a patented high-tech shielding-fibre. Highly transparent, washable, antiseptic, most effective rf-shielding. Optimal for building rf shielding-canopies and emc emi shielding-chamber, fly screens, curtains, cloth, rf protective clothing etc.

This product probably by far offers the world's best RF-shielding-performance among the highly transparent screening fabrics, according to the special survey conducted by Prof. Dipl.-Ing. P. Pauli.

#### 70dB RF shielding fabric Aaronia Shield ULTRA (1m<sup>2</sup>)

High performance shielding fabric Aaronia Shield ULTRA. Comparable to the conventional Aaronia Shield®, but with a higher damping factor of up to 70 dB and non-oxidizing. Perfect for shielding of window surfaces indoors and even outdoors.

Can be used ideal for construction of EMC test chambers or bug-proof conference rooms due to the extremely high damping factor. We recommend the use in combination with the shielding fleece Aaronia X-Dream<sup>®</sup>.



#### E-/H-field shielding fabric Aaronia Mesh (1m<sup>2</sup>)

Aaronia presents the new stainless steel shielding fabric Aaronia Mesh. Ideal for industrial applications as well as for military, research and development. Aaronia mesh has been specifically designed for use under extreme conditions (salt air, extreme temperatures, vacuum, etc.).

Aaronia mesh is made of 100% stainless steel, is temperature stable up to 600 degrees Celsius, has an extremely high attenuation, yet is extremely breathable.

The material reliably attenuates E & H fields. In particular, in the kHz and low MHz range Aaronia mesh offers an extremely high shielding factor of up to 108dB (E-field).



#### Shielding-Panel MagnoShield<sup>®</sup> DUR (0.66 x 2.00 m)

Aaronia's high performance EMC panels Aaronia MagnoShield® magnetic field-shielding & screening. Aaronia's industry-grade EMC magnetic panel-shielding are made from special MuMetal composite panels and allow efficient shielding against virtually ALL radiation: LOW FREQUENCY MAGNETIC FIELDS as well as high frequency RF fields, electric fields and electrostatic fields.

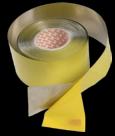
Aaronia MagnoShield® magnetic-shielding is particularly suited for screening against low-frequency magnetic fields emitted from transformers, traction power lines, power cables etc.

Also ideally suited for building bug-proof environments, precision EMC measurement chambers or for protecting highly sensible areas in aerospace.



#### Shielding-Foil MagnoShield<sup>®</sup> FLEX (1rm)

Aaronia MagnoShield<sup>®</sup> FLEX has been developed especially for also shielding high-frequency magnetic fields caused by local radiation sources such as cables, transformers, generators, traction power, power distribution boxes, high-voltage lines etc.



#### Shielding-Foil MagnoShield FLEX+ (1rm, self-adhesive)

Aaronia MagnoShield® FLEX has been developed especially for also shielding high-frequency magnetic fields caused by local radiation sources such as cables, transformers, generators, traction power, power distribution boxes, high-voltage lines etc.



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