Building Biology Products and services





- for large-area shielding of highfrequency electromagnetic waves
- very good tear resistance with soft quality, antistatic, elastic
- 100 % textile properties
- elastic knitted fabric for a wide range of applications
- Organic Cotton, kbA (controlled organic cultivation)
- The New Antiwave quality is a right-left jacquard knit, in a combination of combed organic, certified organic cotton and silver coated polyamide

The coating does not consist of controversial nanosilver, but of 20 % pure silver that surrounds the entire polyamide fibre. The metallic silver is absolutely harmless to human health and to nature.

Pure silver has a natural antibacterial effect and can also have a positive effect on skin problems as well as excessive sweating and body odour.

Thanks to the innovative fabric construction and the use of high-quality materials, this knitted fabric protects against electromagnetic radiation with an efficiency of > 99 %. This is confirmed by an expert opinion by the EMF test lab Bavaria.

Particularly suitable for making linen, pillowcases, blankets, etc.

New Antiwave is a particularly easy-care quality. A highquality finish ensures that the shielding property is retained even after several washes. Due to the antibacterial effect of the silver, washing at 30 - 40 °C is sufficient.



## Shielding knitted fabric

New Antiwave - Woman-Shorts

Туре	MHz	dB	in %
DVB-T2	470 - 690	26	> 99,0
LTE / 5G wide	700 - 750	26	> 99,0
GSM, LTE	920 - 960	26	> 99,0
GSM, LTE	1800 - 1880	23	> 99,0
DECT	1880 - 1900	23	> 99,0
LTE, 5G wide	2110 - 2170	21	> 99,0
W-LAN 2400	2400 - 2500	20	~ 99,0
5G fast	3400 - 3700	17	~ 98,0
W-LAN 5200	5150 - 5350	13	~ 95,0

## Technical data

available sizes:	S, M, L, XL ≈ 36/38, 40/42, 44/46, 48/50		
thickness:	ca. 0,5 mm ± 10 %		
colour:	light grey / silver		
basis weight:	ca. 145 g/m²		
mesh size:	< 0,1 mm x 0,1 mm opaque		
composition:	89 %Cotton (Organic)9 %Polyamide2 %Silver		
properties:	very good tear resistance with soft quality, antistatic, elastic		
wash cycles:	~ 40 x		
basis of examination:	IEEE Standard 299™-2006		
shielding effectiveness:	max. 26 dB (> 99 %)		

## Care instructions

40
particularly gentle washing (delicate or wool wash cycle at 30 or 40 °C)

Image: Scope of application provide the provided provi

can be used as outerwear or underwear

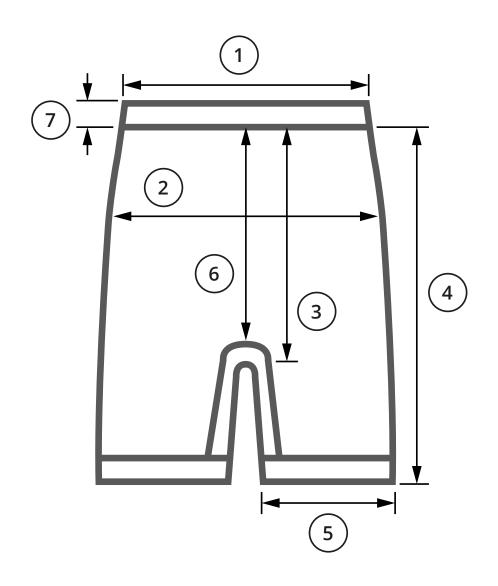


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## New Antiwave - Size/Dimensions

Woman-Shorts

No.	Dimensions (in cm)	S 36/38	M 40/42	L 44/46	XL 48/50	Tol ±
1.	Waist size	30	31	33	36	3 %
2.	Hip size	39	41	43	47	3 %
3.	Rise	30	33	33	35	3 %
4.	Length side	34	34	36	38	3 %
5.	Leg width	23	24	25	27	3 %
6.	Length front	22	23	24	25	3 %
7.	Waistband	2,5	2,5	2,5	2,5	3 %



Biologa Danell GmbH • Hauptstraße 27 • 72336 Balingen • GERMANY • +49 7433 955 7172 • info@biologadanell.com • www.biologadanell.com 🕑

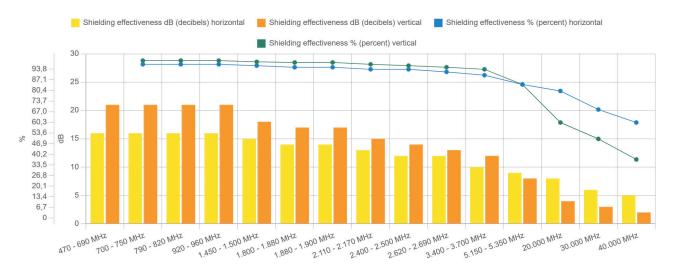


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Туре	MHz	Description
DVB-T2	470 - 690	digital video broadcasting – terrestrial, 2nd generation, TV via antenna
LTE / 5G wide	700 - 750	from 4G, now 5G NR without beamforming / MIMO
GSM, LTE	920 - 960	from 2G - D1, now 5G NR without beamforming / MIMO
GSM, LTE	1800 - 1880	from 2G - D2, E network, now 5G NR without beamforming / MIMO
DECT	1880 - 1900	wireless phone
LTE, 5G wide	2110 - 2170	from 3G, formerly UTMS, now 5G NR without beamforming / MIMO
W-LAN / WiFi 2400	2400 - 2500	wireless LAN
5G fast	3400 - 3700	5G NR - new frequency band with beamforming / MIMO
W-LAN / WiFi 5200	5150 - 5350	wireless LAN

Shielding values according to test report: EMF Test Lab Bavaria

Shielding effectiveness - Antiwave OC white - unstretched - 470 MHz to 40.000 MHz (40 GHz)



1.000 MHz = 1 GHz -/- (according to test report EMF Test Lab Bavaria)

Shielding effectiveness dB (decibels) horizontal Shielding effectiveness dB (decibels) vertical Shielding effectiveness % (percent) horizontal Shielding effectiveness % (percent) vertical 30 93,8 87,1 80,4 25 73,7 67,0 20 60,3 53,6 % 巴 15 46,9 40.2 33,5 10 26,8 20,1 13,4 5 6,7 0 0 1.880 - 1.900 MHz 2.110 - 2.170 MHz 2.400 - 2.500 MHz 1.450 - 1.500 MHz 1.800 - 1.880 MHz 2.620 - 2.690 MHz 3.400 - 3.700 MHz 5.150 - 5.350 MHz 700 - 750 MHz 920 - 960 MHz 790 - 820 MHz 470 - 690 MHZ 20.000 MHz 30.000 MHz 40.000 MHz 1.000 MHz = 1 GHz -/- (according to test report EMF Test Lab Bavaria)

Shielding effectiveness - Antiwave OC white - stretched - 470 MHz to 40.000 MHz (40 GHz)