

WAVASORB® VHY

Advanced Broadband EMC Hybrid Absorber

WITH RESPECT FOR THE ENVIRONMENT: REACH & RoHS COMPLIANT





- ✓ WAVASORB® VHY is a series of truncated pyramidal shaped hybrid absorbers, consisting of ferrite tiles and a truncated pyramidal part.
- ✓ Certified to fire-retardancy and environmental specifications by containing an advanced chemical composition.
- ✓ Outstanding performance in the EMC frequency range, obtained by optimization of the geometry of each individual absorber.
- Excellent power handling capability assured under continuous wave exposure.





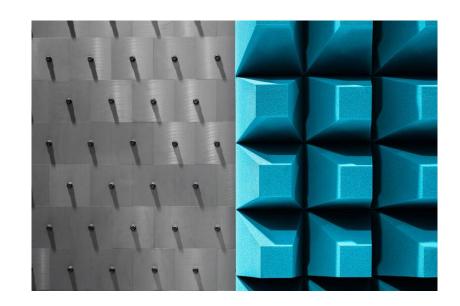
Installation Methods and Chamber Validation

- ✓ WAVASORB® VHY can be installed either fixed or modularly with ferrites.
- ✓ When installed:
 - Fixed: gluing on site necessary;
 - Modularly with ferrites: the ferrites are bolted directly to the reflective sub-construction and the pyramidal part is installed by a hook-in-system with four fixation discs. The modular hook-in-system provides best convenience for installation and replacement and is easy to handle; no gluing on site necessary;
- ✓ E&C Anechoic Chambers and Albatross Projects are present and active in the relevant national and international standard committees. We have the expertise to perform all kinds of EMC test site validation measurements, according to the relevant commercial as well as military standards, amongst others CISPR 16-1-4, CISPR 25, IEC 61000-4-3, IEC 61000-4-22, ISO 11452-2, ANSI C 63.4, VCCI, MIL-STD-461.

Applications

WAVASORB® VHY can be applied:

✓ For commercial and military EMC chambers enabling typical measurement distances from 1 meter up to 10 meter with any volume sizes.



WAVASORB® VHY



Characteristics

Handling Temperature	+5°C to +35°C
Humidity Range	30% to 70%
Frequency Range	9 kHz up to 100 GHz
Maximum Incident Power Density ⁽¹⁾ Fire Retardancy Tests	1,5 kW/m², 0,98 W/in², 750 V/m According to: - UL-94-HBF - ISO 4589-2 - EN 13501-1 Class E; ISO 11925-2 - DIN 4102-1 Class B2 - NRL 8093 Tests 1, 2 and 3
Environmental Testing	Compliant with: - IEC 60068-2-1 Test Ab - AATCC 30-IV (2004)
REACH Compliant	According to EC 1907/2006
RoHS Compliant	According to 2015/863/EU
Quality Control	IEEE Standard 1128 ISO 9001
Product Life	25+ years under controlled environment

⁽¹⁾ Depending on duration & frequency; for more information, contact your local sales representative

Physical properties

	Standard Color ⁽¹⁾	Standard footprint		
WAVASORB® VHY	Light blue	60 cm x 60 cm		

⁽¹⁾ Various colours available on request

	Total height ⁽¹⁾ (cm)	Average weight ⁽²⁾ (kg)	Number of pyramids per piece
WAVASORB® VHY-5	12,7	1,9	81
WAVASORB® VHY-10	25,4	2,5	36
WAVASORB® VHY-12	32,5	3,5	16
WAVASORB® VHY-18	45,7	5,0	9
WAVASORB® VHY-30	77,4	6,5	4

⁽¹⁾ The above-mentioned dimensions have a tolerance of +/- 6 mm

Multiple design-elements go with our WAVASORB® VHY-absorbers, e.g. plastic coating, white-caps on top of the pyramidal parts and ferrites, ... For more information on variables, contact your local sales representative.

⁽²⁾ Without ferrite tiles / weight values are subject to changes







Typical Reflectivity Performance at Normal Incidence

WAVASORB® VHY is tested routinely in-house in the frequency range from 10 MHz to 9 GHz using a set of coaxial lines, waveguides and NRL Arch in accordance with the practice recommended in IEEE Standard 1128. In the GHz range, measurements are performed in the frequency range of 9 GHz up to 100 GHz inside a compact range facility of an external test house.

	30 MHz	50 MHz	70-200 MHz	200-500 MHz	700 MHz	1 GHz	1.2 GHz	2 GHz	6 GHz	10 GHz	15-100 GHz
WAVASORB® VHY-5	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB	-10 dB
WAVASORB® VHY-10	-11 dB	-11 dB	-11 dB	-11 dB	-13 dB	-15 dB	-15 dB	-15 dB	-20 dB	-22 dB	-22 dB
WAVASORB® VHY-12	-13 dB	-16 dB	-18 dB	-17 dB	-16 dB	-15 dB	-13 dB	-13 dB	-15 dB	-16 dB	-20 dB
WAVASORB® VHY-18	-13 dB	-18 dB	-19 dB	-19 dB	-19 dB	-16 dB	-16 dB	-16 dB	-18 dB	-20 dB	-25 dB
WAVASORB® VHY-30	-15 dB	-19 dB	-20 dB	-19 dB	-19 dB	-20 dB	-20 dB	-20 dB	-23 dB	-25 dB	-30 dB



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Safety Considerations: It is recommended to consult the E&C ANECHOIC CHAMBERS product literature, including material safety data sheets, prior to use E&C ANECHOIC CHAMBERS products. These may be obtained from your local sales office.

Warranty: Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range of properties of the material. These values are not intended for use in establishing maximum, minimum or ranges of values for specification purposes. Any determination of the suitability of the material or any use contemplated by the user and the manner of such use is the sole responsibility of the user who must assure that the material as subsequently processed meets the needs of this particular product or use.

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