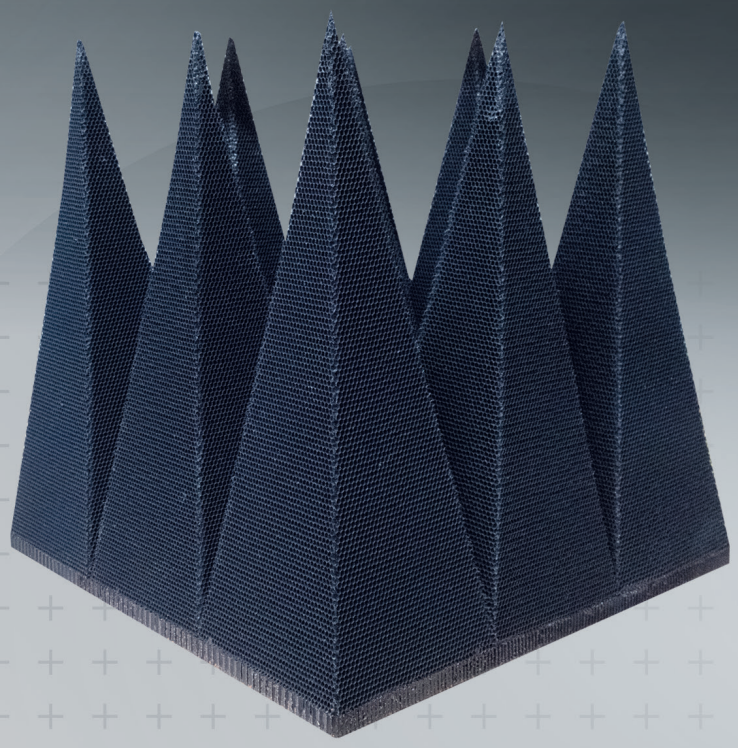
HPX SERIES

High Power Absorbers



SOLUTION FOR

- **High energy areas of chambers and equipment**
- **Radar or communications antennas**

MAIN FEATURES

- Honeycomb material allowing free circulation of air
- High heat dissipation through natural convection or forced air ventilation
- Handles 15 kW/m²; higher power handling capabilities with forced air
- Withstands temperatures up to 176° C (350° F)
- High fire retardancy

PRODUCT CONFIGURATION

Shape

- Pyramidal

Frequency band

- From 80 MHz to 50 GHz

Standard base size

- 2'x2' (609 mm x 609 mm)

Height

- 18 in, 24 in, 36 in
- Customizable sizes available upon request

Operating conditions

- Temperature: up to 176°C (350° F)

Indoor/outdoor

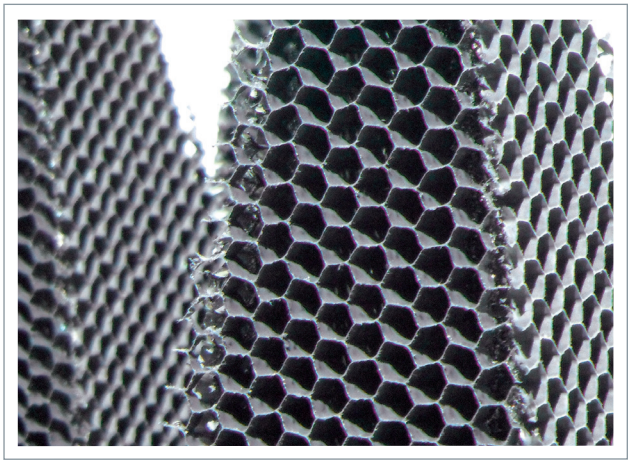
- Indoor

Description

These high power handling absorbers are designed for high energy areas of chambers and equipment. The hollow, pyramidal honeycomb structure allows for quick heat dissipation. Increased power handling is achievable with forced air cooling. Chambers can be partially or fully lined depending on needs. The maximum power handling of the HPX absorbers is 15 kW/m² without air circulation and it can be increased with circulation.

Installation requirements

The properties and capabilities of the HPX series absorber necessitates their installation on mechanical rail and hook support systems.
This type of installation durably secures the absorbers in high temperatures and allows for easy air circulation.



Specifications

Mechanical characteristics

		AEP-18-HPX	AEP-24-HPX	AEP-36-HPX
Height	in	18	24	36
	cm	45.7	60.96	91.5
Pyramids	per block	16	9	4
Base dimension	in	24 x 24	24 x 24	24 x 24
	cm	60.9	60.9	60.9
Power	Watt/m²	15000	15000	15000
	Watt/in²	9.7	9.7	9.7
Nominal weight	lbs/pc.	8	11	20
	kg/pc.	3.6	5	9.1

REFLECTIVITY	AEP-18-HPX	AEP-24-HPX	AEP-36-HPX
@ 80 MHz			10
@ 125 MHz			15
@ 250 MHz		18	23
@ 500 MHz	20	23	27
@ 1 GHz	37	40	42
@ 3 GHz	45	45	50
@ 6 GHz	45	50	50
@ 10 GHz	45	50	50
@ 15 GHz	42	45	47
@ 18 GHz	42	42	43
@ 26 GHz	42	45	45
@ 40 GHz	42	45	45
@ 45 GHz	40	40	40
@ 50 GHz	25	25	25

The degradation of the reflectivity performances around 50 GHz is due to the size of the honeycomb cell that is equivalent to half the wavelength and therefore, limits the attenuation capability of the absorber. Half the wavelength at 48 GHz corresponds exactly at the honeycomb cell diameter.

ORDERING CODE

AEP-xx-HPX (where xx designates absorber height in inches)