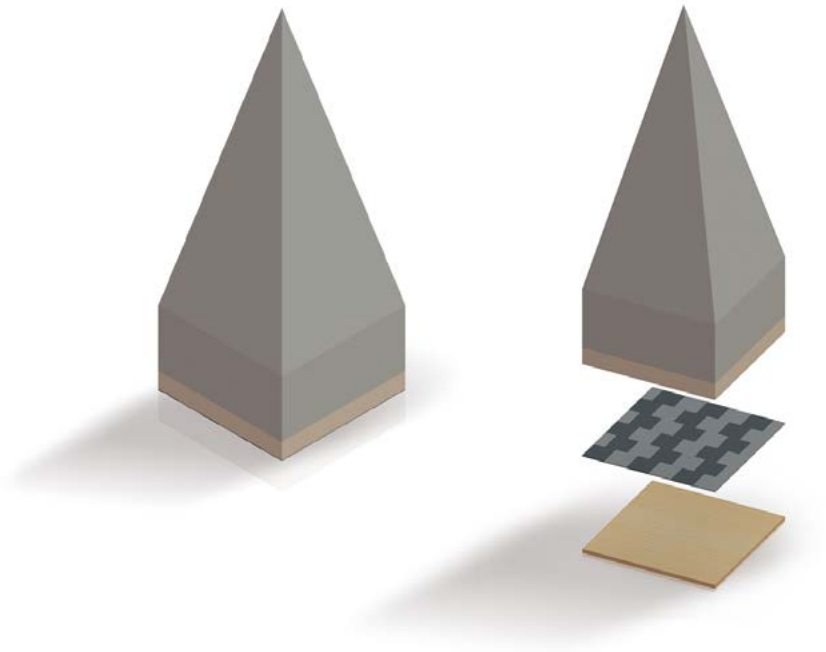
Hybrid Clean Room Absorbers

AEPH-60-CR1



SOLUTION FOR

- **Satellite testing facilities**
- **Space application**

Main features

- Unique manufacturing process
- Suited for Class 100,000 clean room environments

Product configuration

Shape

- Pyramidal

Frequency bands

- 20 MHz to 40 GHz

Standard base size

- 1.97' x 1.97' (60 x 60 cm)

Height

- 63.75" (161.92 cm)

Operating conditions

- Temperature: 70° F +/- 10° (21° C +/- 3°)
- Relative humidity: 55 % RH +/-15 %

Indoor/outdoor

- Indoor

Treatment

- Custom carbon-loaded top with no-load spacer specifically designed for use with ferrite tiles
- Clear latex coating

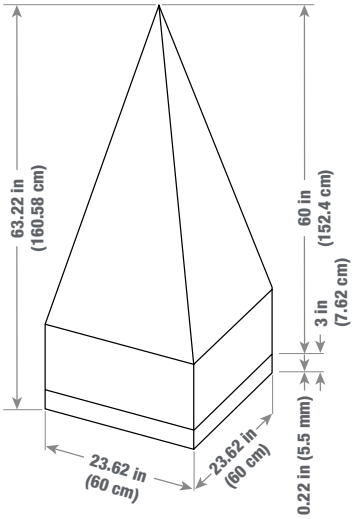
Related certifications

- FS209E
- NRL 8093 - 1, 2, 3
- CISPR 16, 22
- MIL-STD 461/462
- ISO14644
- ANSI C63.4 (2000)
- IEC/EN 61000-4-3

The hybrid clean room absorbers are coated in clear latex top and bottom for use in class 100,000 clean room environments. The overall performance is unaffected by this treatment. These absorbers are used extensively in satellite assembly facilities as well as other aerospace applications.

Ferrite Hybrid Technology

Ferrite absorbers offer good performance from 30 MHz to 600 MHz, while traditional dielectric foam absorbers deliver performance satisfaction above 500 MHz. The combination of the two can yield precarious results if the selected materials have mismatched impedance characteristics.
With proper impedance matching, these two materials can be joined to create a hybrid absorber structure that benefits from the inherent performance characteristics of each of the individual materials. The AEPH series of EMC absorbers incorporates a urethane pyramidal absorber structure which can be precision matched to any brand of tuned ferrite tile absorbers. The resulting product delivers superbroadband reflectivity performance from 20 MHz to 40 GHz!



AEPH-60-CR1 mechanical drawing

Unique Manufacturing Process

After the standard manufacturing process, the absorbers undergo a specific procedure to remove any loose debris left from the manufacturing process, then are coated with a special latex binder.

Specifications

			AEPH-60-CR1
Height		in	63.75
		cm	161.92
Absorption @ Normal Incidence	@ 30 MHz	dB	-19
	@ 125 MHz	dB	-26
	@ 250 MHz	dB	-29
	@ 500 MHz	dB	-29
	@ 1 GHz	dB	-30
	@ 18 GHz	dB	-42
	@ 40 GHz	dB	-45
Power		kW/m^2	1.5
Weight		lbs/pc.	23.0
		kg/pc.	10.4
Fire retardancy			NRL 8093 Test, 1,2 and 3, ISO 11925-2, DIN 4102 Class B2

ORDERING CODE

- **AEPH-XX – CRX, where XX designates absorber height in inches and CRX designates Clean Room Class**

Contact your local sales representative for more information
www.mvg-world.com/absorbers
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