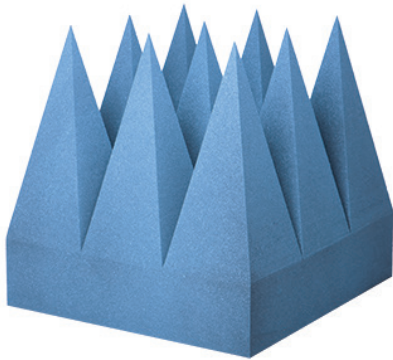


ABSORBER SERIES EHP



SERIES EHP

- » **Non-Hygroscopic Substrate**
- » **Broadband Performance**
- » **1.0 W/in² Greater Power Handling Capability (Dependent Upon Frequency and Duration)**
- » **Reflectivity Performance Testing**
- » **Fire Retardant**
- » **FlexSorb™ Available**

ETS-Lindgren's EHP Series Extra High Performance Microwave Pyramidal Absorber is designed for use over a wide frequency spectrum and has been used as an effective tool for the reduction of reflections from 30 MHz through 100 GHz. Each piece of absorber is fabricated of the highest quality urethane foam, which is cut into a precise bun configuration and impregnated with a conductive carbon using a proprietary formulation. Generally, pyramidal absorber is preferred for specular treatment on chamber back walls, side walls, floors, and ceilings. Applications include military, automotive, and wireless measurement.

Features

Non-Hygroscopic Substrate

ETS-Lindgren absorbers use a new fire-retardant chemical formula that is non-hygroscopic. As a result, the absorber is not affected by moisture and will maintain its mechanical and RF performance over the life of the product.

Broadband Performance

EHP Series absorber is designed to provide excellent RF attenuation over its usable frequency range.

Power Handling Capability

EHP Series absorber can safely perform in environments with operating temperatures up to 90° C (190° F) with a power density capability of 1.0 W/in², dependent upon frequency and duration.

Tested Performance

EHP Series absorber is tested for reflectivity performance using the Naval Research Lab (NRL) broadband swept frequency arch method.

Fire Retardancy

EHP Series absorber meets applicable US government and commercial flammability specifications as verified by an independent testing laboratory.

Optional FlexSorb™ Treatment

ETS-Lindgren's optional FlexSorb covering is engineered to provide enhanced protection and durability for absorber installations in active test environments while preserving critical RF performance. Applied over absorber surfaces, FlexSorb helps protect against mechanical wear from foot traffic, airflow, dust accumulation, and incidental contact during routine testing and maintenance. The flexible, lightweight material conforms closely to absorber geometry, maintaining absorber shape and effectiveness without introducing meaningful measurement degradation.

FlexSorb has little to no impact on RF performance at frequencies below 18 GHz, with only minimal performance variation observed at higher frequencies. In addition to extending absorber service life, FlexSorb supports improved safety and cleanliness within EMC and wireless test chambers, making it well suited for high-use laboratories where long-term performance, reliability, and reduced maintenance are essential.

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Physical Specifications

Model	Absorber Footprint	Pyramids Per Absorber	Base Height
EHP-03PCL	24 in x 24 in	256	1.9 cm (0.75 in)
EHP-05PCL	24 in x 24 in	114	2.5 cm (0.98 in)
EHP-08PCL	24 in x 24 in	64	5.1 cm (2.01 in)
EHP-12PCL	24 in x 24 in	36	5.7 cm (2.24 in)
EHP-18PCL	24 in x 24 in	16	5.7 cm (2.24 in)
EHP-24PCL	24 in x 24 in	9	10.2 cm (4.02 in)
EHP-36PCL	24 in x 24 in	4	15.2 cm (5.98 in)
EHP-48PCL	24 in x 24 in	4	20.3 cm (7.99 in)
EHP-72PCL	24 in x 24 in	1	30.5 cm (12.01 in)
EHP-96PCL	24 in x 24 in	1	30.5 cm (12.00 in)
EHP-120PCL	24 in x 24 in	1	91.44 cm (36.00 in)
EHP-144PCL	24 in x 24 in	1	152.40 cm (60.00 in)

Physical Specifications

Model	Overall Height	Pyramid Height	Weight
EHP-03PCL	8.25 cm (3.25 in)	6.4 cm (2.52 in)	1 kg (2.20 lb)
EHP-05PCL	12.7 cm (5.00 in)	10.2 cm (4.00 in)	1.6 kg (3.53 lb)
EHP-08PCL	21.6 cm (8.50 in)	16.5 cm (6.50 in)	2.8 kg (6.17 lb)
EHP-12PCL	31.1 cm (12.24 in)	25.4 cm (10.00 in)	4.6 kg (10.14 lb)
EHP-18PCL	46.4 cm (18.27 in)	40.6 cm (15.98 in)	4.6 kg (10.14 lb)
EHP-24PCL	61.0 cm (24.02 in)	50.8 cm (20.00 in)	6.1 kg (13.45 lb)
EHP-36PCL	91.4 cm (35.98 in)	76.2 cm (30.00 in)	9.5 kg (20.94 lb)
EHP-48PCL	121.9 cm (47.99 in)	101.6 cm (40.00 in)	11.3 kg (24.91 lb)
EHP-72PCL	182.9 cm (72.01 in)	152.4 cm (60.00 in)	15.9 kg (35.05 lb)
EHP-96PCL	243.84 cm (96.00 in)	213.36 cm (84.00 in)	18.0 kg (39.00 lb)
EHP-120PCL	304.80 cm (120.00 in)	213.36 cm (84.00 in)	35.0 kg (76.00 lb)
EHP-144PCL	365.76 cm (144.00 in)	213.36 cm (84.00 in)	43.0 kg (94.00 lb)

Physical Specifications

Adhesive	Yes
Clip	Yes
Color	Rantec Blue
Environmental	Temperature: 12°C to 32°C (50°F to 90°F) Relative Humidity: 50% ± 20%
Max. Absorber Temperature	90°C (190°F)
Ratings, Fire Retardant	NRL 8093, Tests 1,2,3, TI #2693066, MIT MS-8-21, UL 94 & DIN 4102-B2
Velcro	45.72 cm (18 in)

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Technical Specifications

Electrical Specifications

Model	Frequency Minimum	Frequency Maximum
EHP-03PCL	4 GHz	40 GHz
EHP-05PCL	2 GHz	40 GHz
EHP-08PCL	1 GHz	40 GHz
EHP-12PCL	1 GHz	40 GHz
EHP-18PCL	500 MHz	40 GHz
EHP-24PCL	200 MHz	40 GHz
EHP-36PCL	80 MHz	40 GHz
EHP-48PCL	80 MHz	40 GHz
EHP-72PCL	80 MHz	40 GHz
EHP-96PCL	80 MHz	40 GHz
EHP-120PCL	80 MHz	40 GHz
EHP-144PCL	80 MHz	40 GHz

Maximum Power Density: 1.55 kW/m², 155 mW/cm², 1.0 W/in² (Dependant upon frequency and duration).

Max Reflections

Model	80 MHz	120 MHz	200 MHz	300 MHz	500 MHz	1–2 GHz	2–4 GHz	4–8 GHz	8–12GHz	12–18 GHz	18–40 GHz
EHP-03PCL								-30 dB	-40 dB	-45 dB	-45 dB
EHP-05PCL							-30 dB	-40 dB	-45 dB	-50 dB	-50 dB
EHP-08PCL						-30 dB	-40 dB	-45 dB	-50 dB	-50 dB	-50 dB
EHP-12PCL						-35 dB	-40 dB	-45 dB	-50 dB	-50 dB	-50 dB
EHP-18PCL					-30 dB	-40 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-24PCL			-20 dB	-30 dB	-35 dB	-40 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-36PCL	-11 dB	-13 dB	-25 dB	-30 dB	-40 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-48PCL	-15 dB	-20 dB	-30 dB	-35 dB	-40 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-72PCL	-20 dB	-20 dB	-30 dB	-37.5 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-96PCL	-20 dB	-20 dB	-30 dB	-37.5 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-120PCL	-20 dB	-20 dB	-30 dB	-37.5 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB
EHP-144PCL	-20 dB	-25 dB	-30 dB	-37.5 dB	-45 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB	-50 dB