



The Hermes 3 is designed to perform full-compliance emission and immunity tests at 3m distance on commercial equipment. The design of the structure is optimised for maximum performances, in minimum space. The shielding and its pyramidal absorbers are manufactured by SIEPEL.

### **CHARACTERISTICS**

# Compliance & Performances

2 Compilation a Fortification			
	Normalised site attenuation (NSA) CISPR 16-1-4	Site VSWR CISPR 16-1-4	Field uniformity IEC/EN 61000-4-3
Measurement distance	3 m	3 m	3 m
Frequency range	30 MHz - 1 GHz	1 GHz - 18 GHz	80 MHz - 18 GHz
Guaranteed performances	± 4 dB	< 6 dB	0 / +6 dB
Compliance	Full-compliant	Full-compliant	Full-compliant

### SHIELDING EFFECTIVENESS COMPLIES WITH EN 50147-1 (10 kHz - 18 GHz)

Radiated emission (EMI) testing: Fully compliant with the following standards from 30 MHz to 18 (40) GHz:

- CISPR 11,
- CISPR 16-1-4,
- CISPR 22 / EN 55022.
- CISPR 32,

- EN 50147-2,
- EN 55011,
- ANSI C63.4

Radiated immunity (EMS) testing: Fully compliant with EN/IEC 61000-4-3. Radio standards: All ETSI standards referring to CISPR 16 and EN/IEC 61000-4-3.

# Dimensions (L x W x H)

Total overall with steel stiffeners	Internal usable dimensions	
8.7 x 7.1 x 5.9 m	7.8 x 5.2 x 4.8 m	
28 x 23 x 19 ft	26 x 17 x 16 ft	

### Quality

- All absorbers batches are tested by SIEPEL for reflectivity performances between 30 MHz – 1000 MHz.
- Our raw materials are compliant to RoHS / REACH and free of substances in the current list of Substances of Very High Concern (SVHC) published by the European Chemicals Agency (ECHA).

#### About our absorbers

- HY absorbers power handling: 2 kW/m<sup>2</sup> (CW).
- Both absorbers coated with either aqueous or plastic paint are classified ISO class 4 (ISO 14644-1:2015) clean room conditions.

#### **OUR STRENGTHS**

- High-quality components & parts
- Guarantee of 20 years for the RF performances of our absorbers
  - Guaranteed performances
  - Control of performances before shipment
  - Measurement departement accredited ISO/IEC 17025:2005 (accreditation n° 1-6220, scope available on www.cofrac.fr)
  - Fast delivery: permanent stock available off the shelves
- Setting-up of the chambers by our dedicated installation team







### **CONFIGURATION**



MODULAR SHIELDING

Self-standing structure up to 18 (40) GHz: Metallic frame



**DOOR** 

Manual single leaf swing doors Clearance 1.5 x 2.1 m & removable ramp Clearance 0.9 x 2.1 m



### **CONNECTY PANELS**

Penetration panel on frame including coaxial feedthroughs and waveguides



#### **VENTILATION**

Honeycomb air vents 300 x 300 mm / 1 ft x 1 ft up to 18 (40) GHz



### POWER DISTRIBUTION

Power filter single phase 32 A - 50/60 Hz Power filter three-phase 64 A - 50/60 Hz Electrical package: power distribution, lighting



#### **OPTIMISED ABSORBER LINING**

Ferrite absorbers (walls and ceiling)
Hybrid pyramidal absorbers (partial lining walls and ceiling)

Removable pyramidal absorbers for immunity (floor)



RAISED FLOOR

With ground plane



#### **POSITIONERS**

Turntable diameter 1.5 m - Max payload 1 ton Electrical antenna mast - 1 to 4 m



# PROJECT REALISATION

Project management
Technical design & study
On-site installation



#### PERFORMANCE VERIFICATION

Shielding effectiveness at 900 MHz at critical locations



- Extended shielding performances up to 40 GHz
- Shielded control and amplifier rooms
- Plastic paint for pyramidal absorbers with wide range of colors
- Other types and dimensions of doors
- ➤ Electrically-assisted door latching/unlatching
- Floor hatches with connection points
- Additional power filters, data filters and special feedthroughs
- CCTV / Audio monitoring systems
- Fire detection systems
- On request, some measurements can be accredited ISO 17025 (accreditation number 1-6220, scope available on www.cofrac.fr).
- Military / Automotive / RadioCom standards compliance
- Many other options on demand



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