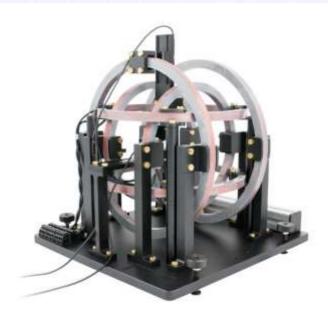
FDG-15

Flux Density Generator





Application

 3-axial magnetic excitation of devices under test

Range of use

- Testing of components in research and development
- Possible combination with a climatic chamber

Features

- Magnetic flux generator for any spatial direction
- Accuracy of magnetic field vector with respect to sensor axis at least ± 1°
- Earth magnetic field cancellation ≤ 1 µT
- Homogeneity of flux ≤ 1 %

Description

The flux density generator type FDG-15 is a reliable tool for generating a static flux density of up to 3 mT in any direction inside the coil system. The homogeneous magnetic field has a maximum deviation of only 1 percent in the specified dimension.

The flux density generator consists of 3 orthogonal Helmholtz coils. Each Helmholtz coil is connected to a DC Power Supply which generates a constant positive current.

If it is necessary to compensate also the smallest magnetic fields like the earth magnetic field, it is possible to generate flux densities of less than $1 \mu T$.

Due to the design of the exciter, it can be placed within a climatic chamber and tested regarding both parameters – magnetic excitation and variable climatic conditions.

SPEKTRA www.spektra-dresden.com

FDG-15

Flux Density Generator



Technical data

Magnetic Unit	
Frequency range	0 Hz
Maximum Flux Density	3 mT
Step width	1 μΤ
Homogeneous Field Dimension Deviation	cube edge size 20 mm ± 1 %
Direction of Flux Density	Any
Dimensions (H x W x L)	367 mm x 368 mm x 380 mm
Environmental Without Temperature control of coils Maximum Temperature of coils	-40 °C 125 °C 150 °C
Total Weight	18 kg
Laboratory Power Supplies (KA3005P)	
Power Supply	110/230 V AC (50/60 Hz)
Output voltage	0 30 V DC
Output current	0 5 A DC
Resolution	10 mV / 1 mA
Environmental	IP20, 040 °C, ≤80 rH, ≤2000 m above sea level
PC Interface	RS232/USB
Fuse	T3 A / 250 V

All specification are at room temperature unless otherwise specified