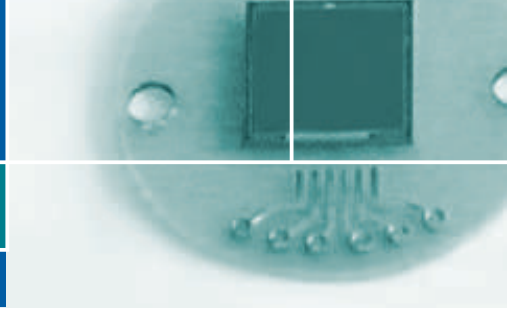
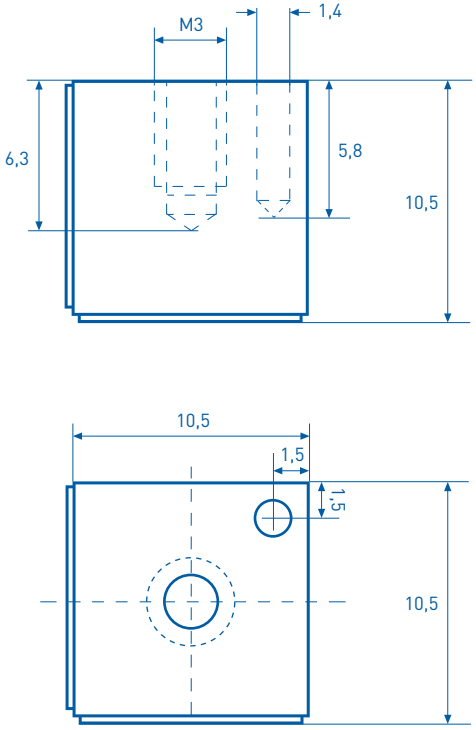
SQUID Magnetometer

Model 3D *green*





The **Model 3Dgreen** can be used for full-vector-measurements of the magnetic field, and is designed for active compensation of magnetic disturbances (e.g. in biomagnetic gradiometers).

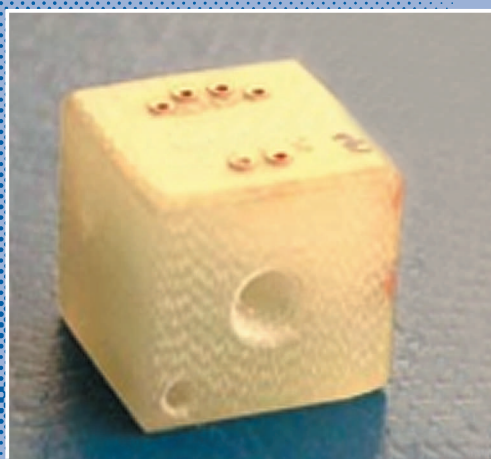
It consists of three low-Tc dc SQUID magnetometers with a field sensitivity of better than 1.6 pT/Hz$^{1/2}$ mounted orthogonal to each other in the holder.

The installation of the **3Dgreen** is very simple because of the lack of any cooled matching circuitry in combination with our standard electronics.

Model 3Dgreen can be supplied as complete measuring system including full cryogenic insert and standard SQUID electronics.

Features

- Chip holder made as a cube with dimensions of only 10.5 mm × 10.5 mm × 10.5 mm to ensure mechanical protection of the magnetometer chips
- Plastic screw simplifies the mounting of the holder
- Solder pads with pure Sn ensure no field distortion at 4.2 K
- The orthogonality of the magnetometer axis is better than 2°
- Effective area of magnetometer A_{eff}= 5200 µm ; $1/A_{eff}$ = 400 nT/Φ_0
- Mutual inductance of integrated feedback coil 160 pH
- Voltage modulation greater than 40 µV
- White noise level better than µΦ_0/Hz$^{1/2}$
- Integrated feedback coil and heater to expel a frozen flux
- Fabricated using the robust all-refractory Nb/Al-AlO_X/Nb technology



Supracon AG | An der Lehmgrube 11 | 07751 Jena | Germany
Tel. +49 [3641] 23 28 100 | Fax +49 [3641] 23 28 109
info@supracon.com | www.supracon.com

supracon®
SQUID and Microfabrication Technologies