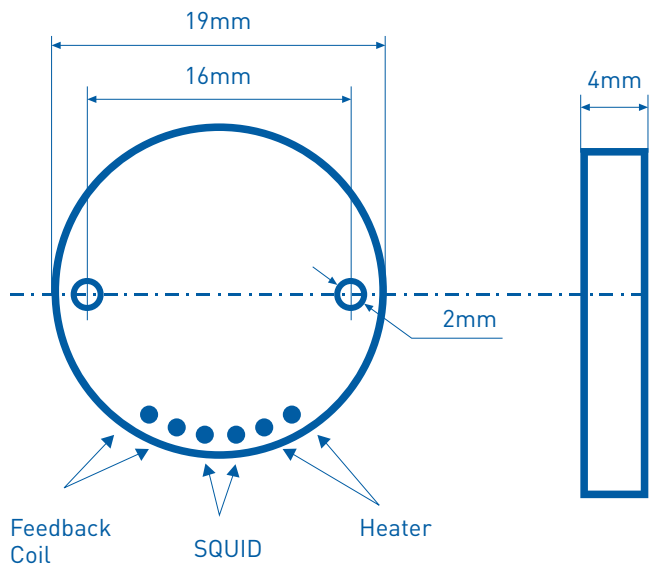
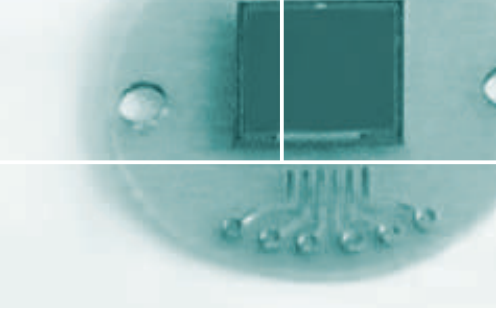


SQUID Magnetometer

Model MS_{green}



The **Model MSgreen** is designed for extremely sensitive measurements of small magnetic fields such as biomagnetic fields of the human heart or brain. With a field sensitivity of better than $3.5 \text{ fT/Hz}^{1/2}$ it is well-suited for these types of applications.

For mechanical protection, easy mounting, and safe handling the magnetometer is placed in a fiberglass capsule as shown schematically in the figure.

Model MSgreen can be supplied with SQUID electronics.

Features

- Chip size $7.5 \text{ mm} \times 7.5 \text{ mm}$
- Effective area of magnetometer $A_{\text{eff}} = 2.4 \text{ mm}$; $1/A_{\text{eff}} = 0.86 \text{ nT}/\Phi_0$
- Three feedback coils are available for your choice with a mutual inductance of:

M = 70 pH	$30 \mu\text{A}/\Phi_0$
M = 40 pH	$50 \mu\text{A}/\Phi_0$
M = 35 pH	$60 \mu\text{A}/\Phi_0$

- Voltage modulation more than $40 \mu\text{V}$
- White noise level better than $4 \mu\Phi_0/\text{Hz}^{1/2}$
- Working temperature 1...5 K
- Integrated on chip heater to expel a frozen flux
- Fabricated using the robust all-refractory Nb/Al-AlO_x/Nb technology

