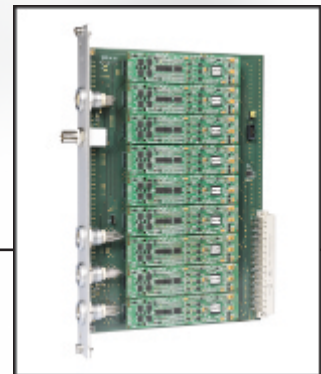


MCFLL – multi channel dc SQUID electronics

- Scalable from 1 to 6500 SQUID channels
- Up to 108 channels per unit
- Uninterruptible battery supply
- Convenient placement of electronics in a rack next to the dewar
- MCFLViewer software for clear channel management
- Additional current sources for TES bias
- For all types of dc SQUID sensors (SSA, 1-stage, 2-stage)
- Adaptable to virtually all measurement tasks



A highly scalable System:



Technical Data

General	■ optimum choice for all types of low-Tc SQUIDs where large numbers of sensors are required ■ 19" case with 6 height units plus 3 height units for BatBox power supply ■ up to 108 channels per units - scalable up to 6500 channels ■ optional shockproofed flight case ■ several adapter options available for SQUID connection and output voltages ■ controlled via optically isolated USB interface ■ LabView® software MCFLLLViewer included ■ importable text file based working point settings and channel name lists ■ additional bipolar current sources for TES bias, thermo switches, and other applications ■ fully differential analog or single ended 5 V output signals ■ integrated frequency generator for all sources ■ power consumption per channel	0.25 W @ 12 V
Bias	■ bias current range ■ bias voltage range ■ bias flux range	± 105 μ A ± 1025 μ V ± 133 μ V
Aux Current Source 1	■ range (other ranges up to ± 2 mA possible)	± 133 μ A
Aux Current Source 2	■ range (other ranges up to ± 2 mA possible)	± 133 μ A
Aux Current Source 3	■ range (switchable via external TTL signal)	± 2000 μ A
Preamp	■ low noise bipolar input stage ■ selectable input termination ■ white voltage noise ■ voltage noise @ 0.1 Hz ■ white current noise ■ current noise @ 0.1 Hz	< 0.7 nV/ $\sqrt{\text{Hz}}$ < 1.4 nV/ $\sqrt{\text{Hz}}$ < 2.5 pA/ $\sqrt{\text{Hz}}$ < 32 pA/ $\sqrt{\text{Hz}}$
FLL Mode	■ maximum FLL bandwidth ■ fast external integrator reset ■ adjustable feedback resistor ■ adjustable gain bandwidth product ■ analog differential or single ended output	5 MHz < 1 μ s 1.6 - 43 k Ω 10 - 500 MHz ± 5 V
Amp Mode	■ gain	2500
Heater	■ maximum voltage ■ maximum power	3.7 V 168 mW



MCFLLL software included
Easy access to all parameters
Powerfull table based channel selection