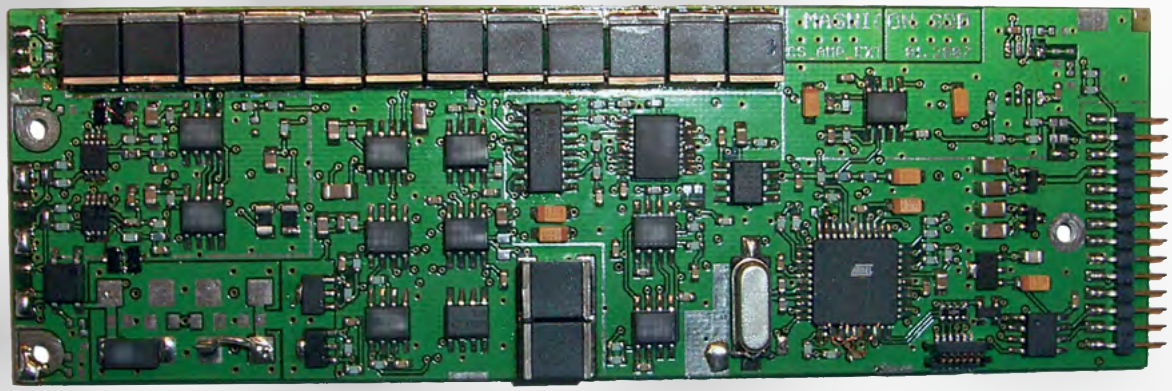
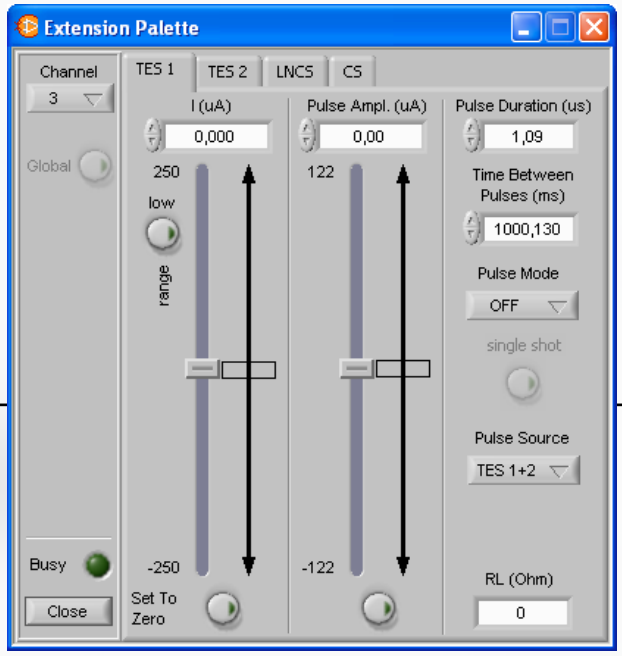
CSE-1 Extension Board

MAGNICON
physical research and instrumentation

CSE-1 – extension board for Magnicon SQUID electronics



- up to seven additional multi-purpose current sources
- optional low-noise high-range current source
- customizable current ranges
- seamless integration into SQUIDViewer control software
- integrable in SEL-1 and XXF-1 SQUID electronics systems



Expand your SQUID electronics application range with a fully integrated solution.

Technical Data

General	■ for additional bias currents, calibration pulses, and magnetic field generation currents	
	■ replaces one SQUID electronics channel	
	■ integrable in SEL-1 and XXF-1 SQUID electronics	
	■ comfortable adjustment of all settings via SQUIDViewer software	
	■ customizable wiring scheme	
	■ customizable current ranges	
TES 1	■ I range (high/low): *(other ranges up to ± 5 mA possible)*	± 5000 / ± 250 µA
	■ PhiX range: *(other ranges up to ± 5 mA possible)*	± 125 µA
	■ calibration pulse option	
	■ pulse duration time	1-2000 µs
	■ time between pulses	0.1-6258 ms
TES 2	■ I range (high/low): *(other ranges possible)*	± 5000 µA / ± 250 µA
	■ PhiX range: *(other ranges up to ± 5 mA possible)*	± 125 µA
	■ calibration pulse option	
	■ pulse duration time	1-2000 µs
	■ time between pulses	0.1-6258 ms
I1	■ range: *(other ranges up to ± 5 mA possible)*	± 250 µA
I2	■ range: *(other ranges possible)*	± 5 mA
High-range low-noise curent source (optional)	■ range: *(other ranges up to ± 100 mA possible)*	± 25 mA
	■ bandwidth (low-noise mode/fast settling)	0.016 Hz / 160 Hz
	■ current noise @ 1 kHz:	7 pA/√Hz
	■ current noise @ 1 Hz:	17 pA/√Hz
	■ current noise @ 0.1 Hz:	800 pA/√Hz
	■ field noise with coil (± 70 µT range)	20 fT/√Hz @ 1 kHz
	■ max. slew rate:	4.6 A/s

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