

SPECIFICATIONS

PFL Operation	Remote control using proprietary Serial Control Code (SCC) 8-bit internally configurable hardware address; address 0 controls all PFLs Up to 255 channels may be controlled independently Master PFL can drive any number of Slave PFLs Each PFL self-recognizes Master or Slave mode
Sensor Types	LTS or HTS
Sensor Coupling	Single (warm) or Dual (warm plus cooled) input transformer options, set via internal hardware switch Bias current 0 - 200 μ A DC or 0 - 200 μ A _{p-p} AC; 1 part in 4096 resolution AC bias frequency: 2, 64, or 128 kHz; remotely configurable Remotely adjustable compensation minimizes AC bias noise peaks
Modulation	0 - 50 μ A _{p-p} , 1 part in 4096 resolution, provided by internal oscillator Modulation Frequency: 256 kHz (for DC, 2 and 64 kHz AC Bias) 128 kHz (128 kHz AC Bias)
Skew	0 - 50 μ A _{p-p} , 1 part in 4096 resolution
Feedback	Internal or External Two feedback coupling ranges, remotely configurable Three feedback modes for each coupling range, remotely configurable
Type I SQUIDs, nominal 5 μ A/ Φ_0 feedback coupling	± 10 μ A, HIGH Sensitivity Mode ± 100 μ A, MEDIUM Sensitivity Mode ± 1 mA, LOW Sensitivity Mode
Type II SQUIDs, nominal 50 μ A/ Φ_0 feedback coupling	± 100 μ A, HIGH Sensitivity Mode ± 1 mA, MEDIUM Sensitivity Mode ± 10 mA, LOW Sensitivity Mode
Integrator	10 μ s, 100 μ s, or 1 ms time constants, remotely configurable
Output	± 10 V
Bandwidth	Up to 100 kHz depending on SQUID voltage swing
DC Offset	Two ranges for Type I and Type II sensor coupling, remotely configurable
Type I SQUIDs	± 5 μ A, 1 part in 8192 resolution 0.1 nA _{p-p} drift over 24 hours typical
Type II SQUIDs	± 50 μ A, 1 part in 8192 resolution 1 nA _{p-p} drift over 24 hours typical

Test Signal Input	Differential; configurable for each channel 10 μ A/V, 100 μ A/V, 1000 μ A/V, remotely configurable 10 mA maximum current, 10 k Ω input impedance
Heater Supply	100 mA current source for heater resistances up to 100 Ω
Power Requirements	\pm 12 VDC, +72/-56 mA in quiescent mode +184/-56 mA with heater on
Size (W×H×D)	2.8 × 0.77 × 4.4 (in) (71 × 19.5 × 112 (mm))
Weight	0.33 lb (150 g)

PC Interface Models PCI-1000 and PCI-100

Specification	PCI-1000	PCI-100
No. of channels	1-8; master/slave mode supported	1; master/slave mode supported
Communications	From PC: RS-232 or parallel port To PFL: Serial Control Code	From PC: RS-232 or parallel port To PFL: Serial Control Code
Analog Outputs	\pm 10 V buffered PFL output, wideband or filtered, remotely configurable	\pm 10 V buffered PFL output, wideband or filtered
Test Signal	Input Front panel; differential, remotely selectable for each channel, \pm 10 V max., 50 Ω Rear panel; 8 differential, \pm 10 V max., 10 k Ω	Front panel; differential, \pm 10 V max., 50 Ω
Filters	Optional 6, 10, 20, and 60 kHz 4-pole Butterworth; four filters may be installed for each channel	5 kHz, 4-pole Butterworth (standard)
Power Requirement	120 or 240 VAC (selectable), 50/60 Hz, 40W (excl. filters)	\pm 12 VDC, +100/-71 mA quiescent mode, +212/-71 mA with heater on (includes PFL). External power source for 120 or 240 VAC incl.
Cable Length	At least 50 m to Programmable Feedback Loop	At least 50 m to Programmable Feedback Loop
Size	(W×H×D) 16.7 × 1.69 × 12.7 (in) (424 × 44 × 323 (mm))	8.31 × 1.69 × 6.7 (in) (211 × 44 × 171 (mm))
Weight	8.16 lb (3700 g)	1.62 lb (738 g)

All specifications are subject to change without prior notice.