Small Instrumentation Modules

SIM983 — Scaling amplifier

- ***Adjustable gain and offset***
- ***3½-digit resolution***
- ***1 MHz bandwidth***
- ***Low-noise input***
- ***±10 V operating range***

- ***SIM983 ... $675*** *(U.S. list)*

SIM983 Scaling Amplifier

The SIM983 Scaling Amplifier provides fine adjustable gain and offset control for analog signals. Both gain and offset are set with 3½ digits of resolution, and the signal path has more than 1 MHz of bandwidth. Its low noise, high gain, and high slew rate make the SIM983 a very convenient tool for sensitive analog signal conditioning.

The digital control circuitry in the SIM983 is designed with SRS's special clock-stopping architecture in which the microcontroller is turned on only when switch settings are being changed. This guarantees that no digital noise contaminates low-level analog signals.

Specifications

Impedance	1 MΩ
Bandwidth	DC to 1 MHz
Input noise	20 nV/√Hz @ 1 kHz
Offset	±10 V (3½-digit resolution)
Max. input	±10 V
Gain	±0.01 to ±19.99
Max. output	±10 V
THD	0.01 % (80 dB) @ 1 kHz
Slew rate	70 V/µs
Operating temperature	0 °C to 40 °C, non-condensing
Interface	Serial via SIM interface
Connectors	BNC (2 front-panel, 1 rear-panel) DB15 (male) SIM interface
Power	Supplied by SIM900 Mainframe, or optionally by a user-supplied DC power supply (±15 V and +5 V)
Dimensions	1.5"×3.6"×7.0" (WHD)
Weight	1.5 lbs.
Warranty	One year parts and labor on defects in materials and workmanship

Ordering Information

SIM983	Scaling amplifier	$675