## **Small Instrumentation Modules**

SIM980 — Analog summing amplifier (4-channel)

- · Four summing inputs
- ±10 V operating range
- · 1 MHz bandwidth
- Low crosstalk (–80 dB)
- ·<100 µV input offset
- High slew rate

• SIM980 ... \$675 (U.S. list)





## - SIM980 Summing Amplifier

The SIM980 Summing Amplifier has four input channels that can be added or subtracted from each other. The *output* noise is less than  $60\,\text{nV/Hz}$ , and crosstalk between channels is less than  $-80\,\text{dB}$ . With a bandwidth of 1 MHz, a slew rate of  $40\,\text{V/\mu s}$ , and input offsets that are trimmed to  $\pm 100\,\mu\text{V}$ , the SIM980 is extremely useful in many analog applications.

The digital control circuitry in the SIM980 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**

Number of inputs 4

Function Inverting, non-inverting or off

 $\begin{array}{ll} \text{Gain} & 1 \times \\ \text{Impedance} & 1 \, \text{M} \Omega \end{array}$ 

Bandwidth DC to 1 MHz Output noise  $60 \, \text{nV} / \sqrt{\text{Hz}} \, @ 1 \, \text{kHz}$ 

Crosstalk  $-80\,\mathrm{dB}$  @  $1\,\mathrm{kHz}$ 

Offset  $\pm 100 \,\mu\text{V}$  (after 5 min. warm up)

Max. input & output  $\pm 10 \text{ V}$ Input slew rate  $\pm 40 \text{ V/\mu s}$ 

THD 0.01 % (80 dB) @ 1 kHz

Output slew rate  $75 \text{ V/}\mu\text{s}$ 

Power

Warranty

Dimensions, weight

Operating temperature 0 °C to 40 °C, non-condensing
Interface Serial via SIM interface
Connectors BNC (5 front-panel, 1 rear-panel)

DB15 (male) SIM interface Supplied by SIM900 Mainframe, or optionally by a user supplied DC

optionally by a user-supplied DC power supply (±15 V and +5 V) 1.5"×3.6"×7.0" (WHD), 1.5 lbs.

One year parts and labor on defects in materials and workmanship

## **Ordering Information**

SIM980 Summing amplifier

\$675

