## Gated Integrators and Boxcar Averagers

SR240A — 350 MHz preamplifier (4-channel)



- · Four independent channels
- · DC to 350 MHz bandwidth
- 1 ns rise and fall time
- · Voltage gain to 625
- · 6.4 nV/√Hz input noise
- $\cdot$  50  $\Omega$  input and output impedance
- · 3 ns overload recovery
- · Excellent phase linearity

· SR240A ... \$1000 (U.S. list)

## SR240A 350 MHz Preamplifier

The model SR240A 350 MHz Preamplifier is a 4-channel, DC-coupled instrument with a gain of 5 per channel. The amplifiers can be used independently or cascaded to provide gains of 5, 25, 125 or 625. The fast rise time, low noise, and DC accuracy of the SR240A make it the ideal instrument for use with photomultiplier tubes and photodiodes.

The SR240A preamp is useful for amplifying small signals to levels that can be processed by other boxcar system modules. Typically, a signal of at least a few millivolts is required at the input of the SR250. If your detector does not supply this signal level, the SR240A can be used in front of the SR250 to ensure sufficient signal amplitude.

## **Ordering Information**

SR240A 350 MHz preamplifier, 4 ch. \$1000

## **SR240A Specifications**

Amplifier channels 4

 $\begin{array}{ll} \text{Inputs and outputs} & 50 \, \Omega, \, \text{DC coupled} \\ \text{Bandwidth} & \text{DC to } 350 \, \text{MHz} \, (-3 \, \text{dB}) \\ \text{Rise/fall time} & 1 \, \text{ns (single channel)} \\ \end{array}$ 

Voltage gain 5 per channel. Up to 4 channels can

be cascaded.

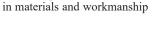
Input noise  $6.4 \,\mathrm{nV/\sqrt{Hz}}$ 

Operating range Inputs:  $\pm 200 \,\text{mV}$ , Outputs:  $\pm 1.0 \,\text{V}$ 

Propagation delay 2.7 ns per channel 3 ns for a  $10^{\times}$  overload Input protection  $\pm 50 \text{ V}$  for  $<1 \mu\text{s}$   $\pm 1.6 \text{ V}$ 

Output overload detect ±1.3 V
Crosstalk –60 dB

Operating temperature 0 °C to 40 °C, non-condensing Mechanical Single-width NIM module Warranty One year parts and labor on defects





phone: (408)744-9040 www.thinkSRS.com