



13050

16 Channel Shaping Amplifier



RIS Model 13050 16-Channel Shaping Amplifier provides 16 independent gain channels. The module provides this high-density function in a single width CAMAC form factor.

All interfaces to the module are provided on the front panel or through the CAMAC bus. Connectors include one 34-pin ribbon header for receiving analog preamplifier pulses, two 34-pin headers with analog outputs, one set of direct and one set attenuated, and one Lemo connector for monitoring selected analog output signals. A front panel status LED provides visible indication when the module is addressed by the CAMAC controller.

The CAMAC interface allows the module to be configured via the CAMAC controller. The gain and dc output baseline of each channel can be configured independently. Setting jumpers inside the module chooses the polarity of each channel. In addition, 1-of-16 channels can be selected for monitoring an individual channel at the front panel.

Each preamplifier channel is configured as a pseudo-differential input circuit to reduce extraneous noise pickup when running long signal cables. The signal input impedance is relatively high, on order of 450-ohms. All outputs exhibit a 50-ohm drive impedance and will drive 50 Ω loads with a 2X attenuation.

PERFORMANCE	Shaped Pulse	4-pole, triangular
	DC output baseline	Independent DC setting (± 50 -mV) via CAMAC
	Shaper Gain	Independent channel gain via CAMAC
	Shaper Polarity	Independent channel polarity via jumpers
	Shaper Monitor	Select 1 of 16 channels to monitor via CAMAC
ELECTRICAL	Preamp Input	± 1 V into 450-Ω
	Power	< 3 Watts from ± 12 V CAMAC Supply
	Current	< 250 mA from ± 12 V CAMAC Supply < 125 mA from +6 V CAMAC Supply
MECHANICAL	Dimensions	Standard CAMAC single-width module 1.70 X 22.15 cm (0.67 X 8.72 in.)
	Weight	1.0 kg (2.2 lb) Net 1.4 kg (3.0 lb) Shipping
CONNECTORS	Front Panel	1 x Lemo 3 x 34 pin 0.1 in. pin spacing shrouded headers
DISPLAYS	LED	Red LED indicates CAMAC activity

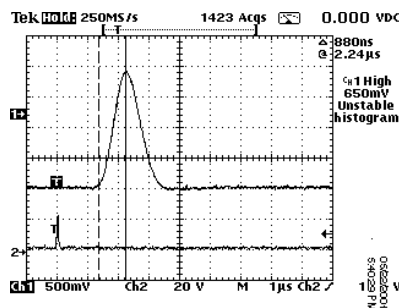


Figure 1. RIS Silicon Shaper output with peaking time of 880 ns. Triangular shape brings pulse back to baseline in < 3 microseconds.