The ORTEC Model 533 Dual Sum and Invert Amplifier is a single-width NIM that incorporates two wideband unity-gain amplifiers. Amplifier A has four summing inputs and Amplifier B has two summing inputs. Both amplifiers invert the signals. If a non-inverting output is required, Amplifier A can be cascaded through Amplifier B to form the noninverting 4-input summing amplifier. By connecting A inputs in parallel and B inputs in parallel, the Model 533 can be used as a non-inverting amplifier with a gain of 1, 2, 3, 6, or 8.

The wide dynamic range and wide bandwidth make the ORTEC Model 533 useful for summing and/or inverting any signals that fall within the dc to 7 MHz bandwidth, such as most NIM-standard linear or logic signals. A convenient oscilloscope monitor test point is located next to each of the six front-panel connectors.

Specifications

PERFORMANCE
VOLTAGE GAIN –1 for each input; tolerances ≤±2%.
BANDWIDTH Dc to 7 MHz (t<sub>ℓ</sub> ≤50 ns).
INTEGRAL NONLINEARITY ≤±0.05%.
TEMPERATURE INSTABILITY Gain ≤±0.005%/°C.
Output DC Level ≤±50 µV/°C.

INPUTS
Four identical inputs for Amplifier A and two for Amplifier B; each accepts 0 to 10 V rated span, 12 V maximum, positive or negative, unipolar or bipolar; Z<sub>i</sub> ~666 Ω, dc-coupled; Inputs A1, A2, B1, and B2 on front panel, Inputs A3 and A4 on rear panel; all BNC connectors.

OUTPUTS
One output for each Amplifier, A and B, completely independent of each other; range 0 to ±10 V linear; Z<sub>o</sub> ~ 0.1 Ω; Outputs A and B on front panel; BNC connectors.

ELECTRICAL AND MECHANICAL
POWER REQUIRED +24 V, 65 mA; –24 V, 65 mA.

WEIGHT
Net 0.9 kg (2 lb).
Shipping 2.2 kg (5 lb).

DIMENSIONS Standard single-width NIM 3.43 X 22.13 cm (1.35 X 8.714 in.) per DOE/ER-0457T.

Ordering Information
To order, specify:
Model Description
533 Dual Sum and Invert Amplifier