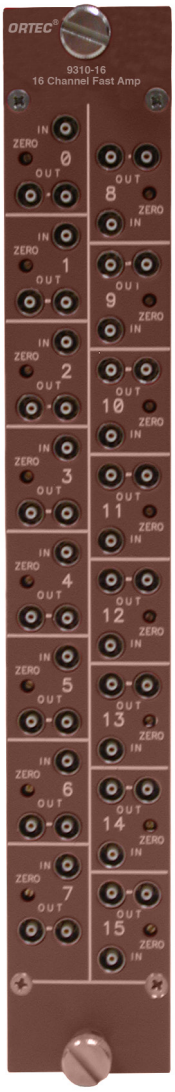
9310-16
Sixteen Channel Fast Amplifier

For Arrays of Photomultipliers, Electron Multipliers, and Microchannel Plates that Require Greater Amplitude, the 9310-16 Provides 16 Channels in a Small Single Width NIM Package.



- Rise Time <1.5-ns (for unipolar ≤±25 mV inputs).
- DC Coupled to allow high counting rates.
- Two Outputs for each Amplifier allows simultaneous counting and timing.

With large arrays of detection devices, the amplitudes can often require more gain to be capable of time discrimination or to drive a counter or some other sensor. The 9310-16 provides a full sixteen channels of amplification in a single width NIM. Two channels can be cascaded for a gain of up to 100 should your experiment require it. An offset adjustment and DC coupling allow for higher counting rates and less baseline distortion encountered with AC coupled amplifiers.

For signals from arrays of photomultiplier tubes, electron multipliers, microchannel plates, or photodiodes, the 9310-16 provides dual outputs from each channel to reduce the need for an additional fan-out for counting and timing applications.

Specifications

The 9310-16 provides sixteen DC coupled bipolar non-inverting fast amplifiers, each with a gain of ten in a single width NIM. Two outputs for each amplifier are provided. Adjustable offset for each output is available via a screwdriver adjustment on the front panel.

PERFORMANCE

Noise <50 µV RMS (referred to the input).

I/O Delay <3 ns.

Crosstalk 50-dB isolation between channels.

Input Dynamic Range 400 mV peak-to-peak.

Rise Time <1.5 ns with unipolar input ±25 mV amplitude.

Gain Fixed gain of 10 ±6%.

Band Width ±25 mV to 250 MHz and ±150 mV to 130 MHz input DC.

INPUTS AND OUTPUTS

Inputs One input for each of the four channels accepts up to ±200 mV. DC coupled. Z_{in} = 50 Ω ±2%. LEMO 00 connector.

Outputs Two outputs for each channel provide up to ±2 V into 50 Ω. Output delay is <10 ns. LEMO 00 connector.

CONTROLS

Zero Front panel screwdriver adjustment; input and outputs must be terminated in 50 Ω for proper adjustment.

ELECTRICAL AND MECHANICAL

Power Required +6 V, 850 mA; –6 V, 850 mA.

Weight Net 0.9 kg (2 lb), Shipping 2.25 kg (5 lb)

Dimensions NIM-Standard single width 3.43 x 22.13 cm (1.35 x 8.714 in) front panel per DOE/ER-0457T.

Ordering Information

Model	Description
9310-16	Sixteen Channel Fast Amplifier

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Specifications subject to change
25-0825