PerkinElmer instruments.
ORTEC Products

425A
Nanosecond Delay

- Aligns fast-timing channels that incorporate coincidence circuits or TACS
- 2- to 65-ns delay in 1-ns steps
- 50-Ω calibrated delay cable for linear or logic signals

The ORTEC Model 425A Nanosecond Delay provides a calibrated delay for any type of signal in 1-ns steps from 0 to 63 ns. Longer delays can be obtained by cascading several Model 425As. The delays are accomplished with RG-58A/U coaxial cables that are interconnected by stripline sections. No power is required to operate the instrument.

The Model 425A has many uses. For example, it can be used for aligning fast-timing channels to operate coincidence circuits or time-to-pulse-height converters. And, because of the high accuracy of the delays, it can be used to calibrate that equipment.

The input and output impedances of the Model 425A are 50 Ω, making it fully compatible with related signal sources and loads in other NIM-standard modular nuclear instruments.

PERFORMANCE

DELAY ACCURACY ±100 ps or ±1% for each delay section used.

MINIMUM DELAY (All Switches Out) 2.0 ns.

IMPEDANCE MISMATCH REFLECTION ≤±2% from any of the delay switches.

ELECTRICAL AND MECHANICAL

POWER REQUIRED None.

WEIGHT
Net 1.0 kg (2.2 lb).
Shipping 1.4 kg (3.0 lb).

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

CONTROLS

Six slide switches, each with an Out position and an In position, permit selection in any combination for total delay; switches select 1, 2, 4, 8, 16, and 32 ns.

INPUTS

BNC connector accepts signal of either polarity to ±600 V maximum; impedance, 50 Ω.

OUTPUTS

BNC connector furnishes input signals with the delay selected by the switches that are set at IN; impedance, 50 Ω.