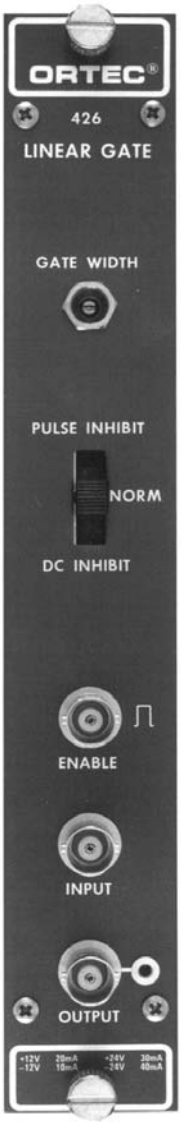
ORTEC®

426
Linear Gate

- **For passing and blocking analog signals in the range from +0.2 to +10 V**
- **Ungated or gated with coincidence or anticoincidence gating**
- **External or internal control of gate pulse width**



The ORTEC Model 426 Linear Gate provides a variable gate duration with width controlled by a single-turn front-panel-mounted potentiometer. The nominal gate duration is from 0.3 to 4 µs. Operation of the linear gate is controlled by a positive enable pulse. It is useful for selecting or inhibiting linear signals according to chosen coincidence or timing requirements.

The ORTEC Model 426 has two operating modes: all input signals not accompanied by an enable pulse are blocked or all signals are passed unless accompanied by an inhibit signal. The inhibit signal can be fed into the front-panel Enable connector for Pulse Inhibit operation or into the DC Inhibit connector for dc or continuous inhibit operation. The DC Inhibit mode provides external control of the gating period.

Specifications

PERFORMANCE

GAIN Unity.

INTEGRAL NONLINEARITY <±0.15% from 0.2 to 10 V.

PULSE FEEDTHROUGH <10 mV with a 10-V input pulse.

TEMPERATURE INSTABILITY <±0.015%/°C, 0 to 50°C.

COUNTING RATE The gain shift of a 4-V reference pulse is <0.25% with the application of an additional count rate of 65,000 counts/s of 6-V random pulses.

CONTROLS

GATE WIDTH Continuously variable from 0.3 to 4 µs.

OUTPUT PEDESTAL Adjustable to <1 mV.

PULSE INHIBIT/NORM/DC INHIBIT 3-position mode switch permits selection of the function of any pulse or dc level furnished through the front-panel Enable Input connector, or the rear-panel DC Inhibit connector.
Norm Input pulse will be gated through to the output during a gate width interval following the leading edge of each Enable Input pulse.
Pulse Inhibit Input pulses will be inhibited from passing through the output during a gate width interval following each Enable Input pulse.
DC Inhibit Input pulses will be inhibited from passing through the output during intervals of pulses or dc levels through the rear-panel DC Inhibit connector.

INPUTS

LINEAR INPUT Unipolar or bipolar with positive portion leading. Rated range 0.2 to 10 V, 12 V maximum. Input impedance >5000 Ω; BNC connector. Input is ac-coupled with a passive symmetric baseline restorer. BLR can be bypassed for dc-coupling.

ENABLE OR INHIBIT INPUT Any positive input >2 V, maximum input 20 V. Enable impedance 1000 Ω, dc-coupled; Inhibit impedance 650 Ω, dc-coupled; BNC connector for each.

OUTPUT

Rated output range 0.2 to 10 V positive; 12 V maximum. Output impedance ~2 Ω, dc-coupled, short-circuit protected; BNC connector.

ELECTRICAL AND MECHANICAL

POWER REQUIRED The Model 426 derives its power from a standard NIM bin/power supply. The power required is +24 V, 30 mA; –24 V, 49 mA; +12 V, 16 mA; –12 V, 4.9 mA.

WEIGHT
Net 0.96 kg (2.1 lb)
Shipping 1.82 kg (4.0 lb).

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

Ordering Information

To order, specify:

Model	Description
426	Linear Gate

Specifications subject to change
011108

ORTEC®
www.ortec-online.com
Tel. (865) 482-4411 • Fax (865) 483-0396 • ortec.info@ametek.com
801 South Illinois Ave., Oak Ridge, TN 37831-0895 U.S.A.
For International Office Locations, Visit Our Website
AMETEK® ADVANCED MEASUREMENT TECHNOLOGY