ORTEC

# ORTEC 9307

## pico-TIMING discriminator

Timing discriminator for very short detector pulses from microchannel plates and fast photomultipliers, with internal pulse shaping to reduce cable adjustment.



| Input amplitude range | Input pulse width (FWHM) | Threshold range |
|---|---|---|
| **−50 mV…−5 V** [1] | **400 ps–5 ns** [1] | **−25 mV…−1 V** [1] |

## Specifications

### PERFORMANCE

| | | |
|---|---|---|
| Input pulse width (FWHM) | 400 ps–5 ns | [1] |
| NIM pulse-pair resolution | <10 ns | [1] |

### MEASURING RANGE

| | | |
|---|---|---|
| Input amplitude range | −50 mV…−5 V | [1] |
| Threshold range | −25 mV…−1 V | [1] |

### ELECTRONICS & SIGNAL

| | | |
|---|---|---|
| Maximum burst input/output rate | 100 MHz | [1] |
| Input impedance | 50 Ω | [2] |
| Nominal NIM pulse width | 2.5 ns | [1] |
| TTL pulse width | 500 ns | [2] |

### GENERAL

| | | |
|---|---|---|
| Time walk | <±20 ps, −150 mV…−1.5 V; 1 ns width, 350 ps rise/fall times | [1] |

## Sources

[1] **9307 pico-Timing Discriminator**
ORTEC (AMETEK) · product-page · product page; Specifications – Input; Specifications – NIM outputs · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/electronic-instruments/fast…

[2] **9307 – pico-Timing Discriminator**
ORTEC (AMETEK) · datasheet · p. 2 · checked 2026-10-16
https://edge.sitecorecloud.io/ametekinc1236b-ametekb19a-productiondcfa-1d17/media/Project/Ametek/ortec-onlin…

Every value is taken from the manufacturer’s own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer’s published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.