ORTEC

ORTEC 9302

Amplifier and discriminator

Fast amplifier and discriminator for photon, ion and electron counting.



Gain	Rise time	Noise at maximum gain
20 or 200; non-inverting [1]	**Typically 3.0 ns** [2]	**≤10 µV** [2]

Specifications

PERFORMANCE

Noise at maximum gain	≤10 µV	[2]
Nonlinearity	≤±1 %	[2]
Pulse pair resolution	<10 ns; typically 9 ns	[1]

MEASURING RANGE

Analog output into 50 Ω	0––500 mV	[1]

ELECTRONICS & SIGNAL

Gain	20 or 200; non-inverting	[1]
Discriminator threshold	50 mV–1 V	[2]
Input impedance	50 Ω	[1]

GENERAL

Rise time	Typically 3.0 ns	[2]
Walk	≤2.0 ns from ×2 to ×20 threshold	[2]

Sources

[1] **9302 Amplifier Discriminator**
RTEC (AMETEK) · product-page · product page · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/electronic-instruments/ampl…

[2] **9302 – Amplifier Discriminator**
ORTEC (AMETEK) · datasheet · p. 1 · 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.