ORTEC

ORTEC 566

Time-to-amplitude converter

Converts the interval between start and stop pulses to an analog amplitude for time spectroscopy.



Base full-scale ranges	Range multipliers	Maximum full-scale range
50, 100, 200 ns [1]	**, 10, 100, 1000, 10 000** [1]	**2 ms** [1]

Specifications

Base full-scale ranges	50, 100, 200 ns	[1]
Range multipliers	1, 10, 100, 1000, 10 000	[1]
Maximum full-scale range	2 ms	[1]
Time resolution (FWHM)	≤0.01% of full scale + 5 ps, all ranges	[1]
Integral nonlinearity	≤±0.1%, from 10 ns or 2% full scale (whichever is greater) to 100% full scale	[1]
Typical differential nonlinearity	<1%, from 10 ns or 2% full scale (whichever is greater) to 100% full scale	[1]
Output delay, internal strobe	0.5–10.5 µs	[1]
TAC output amplitude	0…+10 V	[1]

Sources

[1] **566 Time-to-Amplitude Converter**
RTEC (AMETEK) · datasheet · p. 1, Controls (RANGE); p. 1, Controls (MULTIPLIER); p. 1, features/description · checked 2026-10-16
https://web.archive.org/web/20231020180933/http://www.ortec-online.com/-/media/ametekortec/brochures/5/566-a…

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.