

STANFORD RESEARCH SYSTEMS

DG535

The Stanford Research Systems DG535 is a digital delay and pulse generator providing four precisely-timed logic transitions or two independent pulse outputs. It features a 5 ps delay resolution, very low jitter, and a wide delay range of up to 1000 seconds, making it an industry standard for laser timing systems, automated testing, and precision pulse applications.

SPECIFICATIONS

General

Interfaces	GPIB
Display	20-character backlit LCD
Instrument Setup Memory	9 non-volatile instrument setups

Physical

Power Supply	100, 120, 220, or 240 VAC, 50/60 Hz, 70 W
Operating Temperature	0 to +50 °C
Dimensions (W×H×D)	356 × 89 × 356 mm
Weight	4.5 kg

Delays

Number of Delay Channels	4 (A, B, C, D)
Delay Range	0 to 1000 s
Delay Resolution	5 ps
Insertion Delay	~85 ns (external trigger to T0)
Delay Linking	Channels can be linked to T0 or any other delay channel

Internal Rate Generator

Trigger Rate Range	1 mHz to 1 MHz
Rate Resolution	4 digits
Triggering Modes	Internal, External, Single-shot, Burst, AC Line

Front Panel Outputs

Available Output Types	TTL, ECL, NIM, Variable
Variable Amplitude Range	-3 V to +4 V
Amplitude Resolution	10 mV
Maximum Output Transition	4 V
Output Impedance Limits	50 Ω or High-Z termination

Timebase and Reference

Standard Oscillator Type	Crystal oscillator
Standard Oscillator Stability	25 ppm
Optional Oscillator Type	TCXO (Temperature Compensated Crystal Oscillator)
Optional Oscillator Stability	1 ppm

Triggering

External Trigger Threshold	±2.56 V (10 mV resolution)
External Trigger Slope	Positive or negative

Performance

Trigger to T0 Jitter	2.5 ns rms
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Timebase

Internal Timebase Frequency	10.0 MHz
External Timebase Input	10.0 MHz (typical 1 Vpp)

Outputs

Front Panel Outputs	T0, A, B, C, D, AB, -AB, CD, -CD
TTL Output Level	0 to 4 VDC (nominal into 50 Ω or high impedance)
ECL Output Level	-1.8 to -0.8 VDC (into 50 Ω)
NIM Output Level	-0.8 to 0 VDC (into 50 Ω)

TECHNOLOGY

Digital Delay Generation

APPLICATIONS

Laser timing, automated testing, precision pulse applications

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.