

DCS025 Deskew Calibration Source



Key Features

10 ns signal fall time

Only 1 ns static skew

5 V and 100 mA time-aligned
output signals

Loop size compatible with 30,
150 and 500A current probes

Compatible with standard and
high-sensitivity current probes

The DCS025 Deskew Calibration Source generates time-aligned voltage and current pulses for precise deskew of voltage and current probes. This is critical for measurements in which small propagation delay differences between probes can have a large impact on a calculated measurement, e.g., instantaneous power semiconductor device loss measurements.

Simple to Use

A voltage probe connects to the voltage pulse signal and ground connection and a current probe connects around the current pulse loop. Propagation delay differences between the two probes are then measured and manually deskewed by the operator using the Deskew adjustment in the oscilloscope's Channel setup dialog.

Large Current Loop

The DCS025 has a large current loop that is compatible with Teledyne LeCroy small (e.g., CP03x) and large sized current probes (e.g., CP150, CP500). Channel acquisition averaging permits measurement of the output current amplitude with higher amperage current probes.

Low Static Skew

The internal static skew of the DCS025 is only 1 ns – well-matched to the rise times of the DCS025 and the probes commonly used for power semiconductor device loss measurements.

Automatic Triggering Setup

The DCS025 connects to the EXT input of the oscilloscope and outputs a trigger signal to simplify time alignment and deskew operations to the signal fall time at the center of the oscilloscope display.



CP030 30A current probe and HVD3106 high voltage differential probe connected to an HDO6104A-MS 12-bit resolution high definition oscilloscope. The DCS025 is connected to the EXT input (to conserve analog channels) and the deskew amount is adjusted for one of the probes in the channel dialog menu.



CP150 150A current probe and HVD3106 high voltage differential probe connected to an HDO6104A-MS 12-bit resolution high definition oscilloscope. The DCS025 is connected to the EXT input (to conserve analog channels) and the deskew amount is adjusted for one of the probes in the channel dialog menu. In this case, a vertical Zoom of the current signal is used for deskewing.

Specifications

Electrical Characteristics

Signal Fall Time (80-20%)	10 ns
Static Skew Between Inputs	<2 ns (guaranteed) <1 ns (typical)

Environmental

Operating Temperature Range	0 to 50 °C
Non-operating Temperature Range	-40 to +70 °C
Humidity	5% to 95% RH (10 to 40 °C); 5% to 75% (above 40 °C); RH not controlled below 10 °C
Operating Altitude	3000 meters maximum

Physical

Dimensions (WxHxD)	46 mm x 24 mm x 108 mm (1.81" x 0.95" x 4.25")
Weight	119 g (0.26 lb)

Compatibility

The DCS025 requires the Teledyne LeCroy oscilloscope to be running firmware version 8.4.1.4 or greater in order to utilize the automated triggering setup. Otherwise, the DCS025 is compatible with any ProBus compatible Teledyne LeCroy oscilloscope

Ordering Information

Product Description

Deskew Calibration Source

Product Code

DCS025

Customer Service

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



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