



0.12 mV – 60 V
0.2 mV – 100 V
0.1 ms – 2 s
0.5 Hz – 1 MHz

The SC-340 is a signal generator for checking and calibrating the deflection factor, sweep rate, pulse response, and triggering of oscilloscopes with bandwidths up to 100 MHz.

The SC-340 allows users to adjust their oscilloscope for more efficient usage. Not only that, but the SC-340 also allows major adjustments to be performed, making measurements more reliable.

It serves also as a general purpose signal generator.

Adjustment items are as follows:

1. Deflection factor and attenuator compensation (maximum output voltage: 100 V, square-wave: 1 kHz)
2. Sweep rate (high accuracy by using a highly stable crystal oscillator)
3. Pulse response (square wave with low distortion)
4. Leading edge of square wave (rise time: 300 ps or less)
5. Trigger checking

Specifications

Voltage caribrator (calibrates deflection factor)

Output voltage	: 0.12 mV – 60 V, 18 steps (1.2-3-6) 0.2 mV – 100 V, 18 steps (1-2-5) accuracy; within $\pm 0.5\%$ (into 1 M Ω load)
Output waveform	: Square wave
Polarity	: Positive going from 0 V base line
Rise time	: 5 μ s or less
Waveform distortion	: $\pm 0.5\%$ or less
Output R	: 50 Ω (0.12 mV – 0.2 V range)

Time calibrator (calibrates sweep rate)

1) Pulse train	: 0.1 μ s – 2s, 23 steps (1-2-5) accuracy; within $\pm 0.05\%$
Output voltage	: 0.1 V or more (into 50 Ω)
Output waveform	: Pulse
Polarity	: Positive going
2) HF	: 10 ns, 20 ns accuracy; within $\pm 0.05\%$
Output voltage	: 0.2 V or more (into 50 Ω)
Output waveform	: Sine wave (10 ns), square wave (20 ns)

Sine-wave generator (checks triggering)

Frequency	: Line frequency; 50/60 Hz or 1 kHz $\pm 20\%$
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Waveform calibrator (calibrates pulse response)

Output waveform	: Square wave
Rise time	: 5 ns or less
Output frequency	: 0.5 Hz – 1 MHz, 20 steps (1-2-5)
Output voltage	: Approx. 50 mV (50 Ω load) min.

High-speed rise calibrator (calibrates rise of square wave)

Output waveform	: Oscillation of tunnel diode
Repetitive frequency	: 10 kHz – 200 kHz
Rise time	: 300 ps or less
Waveform distortion	: 3% or less (measured with 100 MHz oscilloscope)

Temperature range for

guaranteed accuracy	: +10°C – +35°C
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Operating temperature

range	: 0°C – +50°C
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Power supply

	: AC 100/117/217/234 V $\pm 10\%$, 50/60 Hz, approx. 15 W
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Weight

	: Approx. 3.5 kg
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Dimensions

	: Approx. 210(W) X 100(H) X 350(L)mm
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