Electronic Stroboscope

1546 Strobotac® Series

The 1546 Strobotac Digital Stroboscope features a large, I ve-digit LED readout that automatically displays the [ash rate in bold. easy-to-read digits. This display eliminates the need to calibrate and read a dial to obtain accurate speed measurements.



Model 1546-B Digital Stroboscope

- For machine maintenance
- Real time inspection of moving parts
- Printing press applications
- Motor troubleshooting
- For stopping motion
- Quartz crystal accuracy of ± 0.01% for speed,

Encased in a ragged, high-impact housing, the 1546 is designed for maximum portability. Its light-weight design (just 2.65 pounds) promotes had-held operation and permit access to hard-to-light areas under inspection. The strobe also may be operated from any flat surface or mounted on a tripod.

The 1546 emits a high intensity, short duration flash of light for crisp, clear images of fast moving objects. It has a broad flash frequency range from 100 to 25,000 flashes per minute.

The 1546 is capable of both internally and externally triggered modes of operation. In the internal mode, the flash is triggered by an internal oscillator pulse that can also drive other Strobotac stroboscopes for additional light sources. In the external mode, the 1546 operates as a digital tachometer when a voltage pulse or turns, or rpm measurements

- Large five-digit LED readout for instant, accurate readings
- Flash rates ranging from 100 to 25,000 fpm in three ranges
- Input connector for external triggering

contact closure is activated by the rotation of an object.

The unit is particularly suited to speed measurements because of the instant digital readout. In machinery design and maintenance applications, the 1546 will help determine the speed of rotating components, slippage between shafts, condition of belts and gears, alignment of couplings, and effect of chassis vibration, all at operating speed. It is very useful for quality control inspection and set-up of process machinery such as bottling, canning, packaging, and stamping operations. Other ideal applications are textile machinery adjustments, printing press registration, electrical equipment design and servicing, photography of high speed events, and physics lab demonstrations.

SPECIFICATIONS

Flash Rate:

100 to 25,000 flashes per minute (frm) in three over- lapping ranges	Range	frm
	1 Low	100-700
	2 Med	600-4,200
	3 High	3,600-25,000

Flash Duration:

approximate	Range	μs
	1 Low	2
	2 Med	2
	3 High	1.2

Accuracy: ± 0.01%, crystal-controlled time base. Display accuracy limited by resolution of display below 10,000 frm to ± 1 frm.

Tachometer Function: LED display reads for both internal and external modes.

External Trigger: Three-terminal phone jack, > + 1.0 V pulse, > 0.75 rms sine wave, or contact closure.

Trigger Output: > 2.5 V behind 1 k Ω .

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Features

Environment:

0 to 50° C operating, -40° C to $+75^{\circ}$ C storage.

Humidity: 95% RH at + 40°C (MIL E-16400-44.5.4.6).

Vibration: 0.03 in DA from 10 to 55 Hz. 4 in or 45°C (MIL-810A-VI). Bench Handling:

Shock: 30 g, 11 ms.

Power: 105 to 125 V, 50 to 60 Hz, 20 W.

Mechanical: Molded plastic case with plastic face plate to protect lamp, diffused-finish and anodized-aluminum reflector, standard 0.25-

20 threaded hole for tripod mounting or handle grip.

Dimensions: 10.952 cm H x 10.795 cm W x 23.495 cm D

(4.312" x 4.25" x 9.25")

Weight: 1.2 kg (2.65 lb.) net, 1.55 kg (3.4 lb.) shipping

ORDERING INFORMATION

1546-9700 1546 Strobotac Digital Electronic Stroboscope

INCLUDES:

Calibration Certificate Traceable to NIST Phone plug for input and output jacks

Attached Power Cord

OPTIONAL ACCESSORIES: Calibration Data

1538-9610 Replacement flash lamp for 1546