

# SHIMPO INSTRUMENTS

## **The DT-3011N heavy duty, AC powered stroboscope provides the illusion of “stopped motion”.**

By adjusting the flash rate, systems in motion appear to be standing still or in slow motion. These strobes can measure rotational (RPM) or reciprocating (strokes per minute) speeds with the same precision as an electronic digital tachometer. Ideally suited for printing inspection, motion analysis, preventive maintenance and speed measurement of repetitive motion, DT-3011N strobes provide timely data on vibrating parts, leaks, spray patterns and a variety of industrial and scientific operations. The DT-3011N stroboscope is extremely easy to maneuver and operate via its lightweight, compact design combined with a simplified user interface. Its rugged metal construction provides unequaled reliability in the harshest environments.

### Features

- Aluminum construction provides exceptional durability
- High polish and focused reflector eliminates “blind” viewing areas
- External trigger allows unit to be automatically synchronized with equipment
- Light emission auto-off timer (1 - 120 min.) conserves flash tube life
- Phase shift, set in degrees or ms, allows visual analysis of rotating/reciprocating objects
- Save up to 5 user configurations to enable switching quickly between machinery
- Synchronous output enables master strobe to drive the flash rate of connected strobes
- Easy tri-pod or permanent mounting with integral mounting thread

### Easy Operation Control



**POWER** Turns power ON/OFF

**DIAL**

(Lamp Power) Turn clockwise or counterclockwise to change the emission frequency and some setting values. Press and hold the center to turn the lamp ON/OFF.

**MODE**

Press this to switch the LED display as follows: Flashes Per Minute mode (FPM mode) > Phase Shift mode (PHA mode DEG = delay angle) > Phase Shift mode (PHA mode ms = delay time)

**LOAD**

Press to load the saved settings. Also Press and hold to save the current display and mode settings.

**SIG**

Select Internal or External parameter modes. Internal flash emission changes with DIAL; External flash rate is synchronized with external sensor signal

**UNIT**

Each press switches the delay type as follows: delay angle (DEG) > delay time (ms)

**x2**

Press in INT to double the current set emission count (frequency).

**÷2**

Press in INT to halve the current set emission count (frequency).

Measuring Quality

## DT-3011N Heavy Duty, AC Powered Stroboscope



SEALS USA, Inc.

1.888.610.7664

 [www.calcercert.com](http://www.calcercert.com)

[sales@calcercert.com](mailto:sales@calcercert.com)

## DT-3011N Specifications

<b>Flashing Range</b>	30.0 - 35,000 fpm (flashes per minute)
<b>Accuracy</b>	±0.05 % of reading
<b>Resolution</b>	30.0 to 5000.0 : 0.1 fpm; 5001.0 to 8000.0 to 0.2 fpm; 8001.0 to 10000.0 : 0.5 fpm; 10001.0 to 35000.0 : 1.0 fpm
<b>Lux Rating</b>	8" (20 cm) Distance = 1950 lx @ 1500 fpm, 2000 lx @ 6000 fpm with 8" (203 mm) irradiation diameter. 20" (50 cm) Distance = 725 lx @ 1500 fpm, 850 lx @ 6000 fpm with 12" (305 mm) irradiation diameter.
<b>Lamp Lifetime</b>	Typ.1200 hours at 1500 fpm
<b>Display</b>	6-digit, 7 segment red LED
<b>Flash Duration</b>	20 $\mu$ sec
<b>Phase Shift</b>	0 to 359° set by 0.1° resolution; 0.00 to 999.99 msec set by 0.01 msec resolution, 1000.0 to 1994.4 msec set by 0.1 msec resolution
<b>Power Requirement</b>	100 to 115 VAC +/-10% 50/60 Hz; -EU: 200 to 240 VAC 50/60 Hz
<b>Input Signal</b>	H level: 2.5 – 12 V; L level: 0 – 0.5 V Pulse width : 50 $\mu$ s or more Input impedance : 10 k $\Omega$ or more
<b>Input Signal Range</b>	27 to 35,020 fpm (1 fpm resolution) with available delay setting in degree or msec
<b>Sensor Power Supply</b>	DC 12 VDC 40 mA
<b>Temperature Limits</b>	32 to 104°F (0 to 40°C)
<b>Humidity Limits</b>	35 to 85% RH (Non- condensing)
<b>Product Weight</b>	2.6 lb (1.2 kg)
<b>Package Weight</b>	5.7 lb (2.6 kg)
<b>Approvals</b>	RoHS
<b>Warranty</b>	1-Year
<b>Included Accessories</b>	Input Signal Connector

## Ordering Details

<b>DT-3011N</b>	Heavy duty, Xenon stroboscope, AC powered
<b>DT-3011N-KIT</b>	Heavy duty, Xenon stroboscope, AC powered with Spare Flashtube, Carrying Case
<b>DT-3011N-EU</b>	Same as DT-3011N except with 230V power and Euro Plug
<b>DT-3011N-KIT-EU</b>	Same as DT-3011N-KIT with Euro Plug Cable
<b>NIST-STROBE</b>	NIST traceable certificate for digital stroboscopes, includes data

## Accessories

<b>SG-300</b>	Rubber strobe guard
<b>CABLE-361-10FT</b>	Daisy chain syncing connection cable for DT-3011N stroboscopes, 10 ft length



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