

### DT-315AEB Portable Stroboscope

**The DT-315AEB Portable Stroboscope with Rechargeable Battery** incorporates a robust, extruded aluminum housing with a precise, repeatable accuracy allowing it to be the solution for the most demanding applications. A truly portable unit, the DT-315AEB operates independent of line power via an exterior battery pack that can be carried with a convenient shoulder harness or set down to allow the operator full movement for visual inspection. When fully charged, rechargeable batteries power the strobe for approximately four continuous hours.



#### Features

- *Extruded aluminum construction: Extraordinary durability yields long service life*
- *External battery supply: Lightweight; enables easy portability*
- *Repeatable accuracy ( $\pm 0.01\%$  of reading): Fully meets the strictest tolerances*
- *Phase shift (in degrees of delay time): Enables visual analysis of rotating/reciprocating objects through all points of motion/time/angle*
- *Flash timer control: Prolongs flash tube life*
- *Manual flash controller knob: Permits easy/accurate adjustments to flash rate*
- *External trigger: Allows synchronization of the flash rate with the motion of the rotating machinery*
- *Continuous duty cycle: Eliminates downtime waiting for unit to cool*
- *Highly polished focused reflector: Prevents "blind" viewing areas*

#### Easy Operation Control



**SIG**

Change Operation from INTERNAL to EXTERNAL flash control

**MODE**

Internal Signal "MODE" (Flash) or External Trigger Control LED Changes to Indicate FPM (flash/min.), flash delay in degrees and flash delay in milliseconds

**X2 / ÷2**

Adjust Flash Rate Settings Increase 2 times or decrease by 2 the flash rate setting when in "Internal" mode

**+/-**

Phase "SHIFT" Advance or Retard viewed motion in degrees or milliseconds

## DT-315AEB Specifications

<b>Internal Mode</b>	<b>Flashing Range</b>	40.0 - 35,000 FPM (flashes per minute)
	<b>Accuracy</b>	±0.01% of reading
	<b>Resolution</b>	0.1 FPM: 40.0 - 4,999.9 FPM 0.2 FPM: 5,000 - 7,999.8 FPM 0.5 FPM: 8,000 - 9,999.5 FPM 1 FPM: 10,000 - 35,000 FPM
	<b>Phase Shift</b>	Use +/- push buttons (360° in 6 seconds)
	<b>Display Update Time</b>	0.2 sec approx
	<b>Output Signal</b>	Synchronous, 400 msec. Pulse output, 0 to +12 VDC amplitude(approx.), 4.7 KΩ impedance
	<b>Rate Multiplier/Divider</b>	154 mJoules per flash
	<b>External Mode</b>	<b>Flashing Range</b>
<b>Accuracy</b>		±0.01% ±1 digit
<b>Phase Shift</b>		0 - 359° with 1° resolution
<b>Delay Time</b>		0 - 2,000 msec from 40 - 10,000 FPM
<b>External Trigger Input Signal</b>		LO level: 0 - 0.8 VDC, HI level: 2.5 - 12 VDC or open collector (NPN), pulse width 50 msec min.
<b>Input Impedance</b>		4.7 KΩ at 12 V / 6.8 KΩ at 0 V
<b>General</b>	<b>Display</b>	5 digits, 0.4" (10 mm) high, LED
	<b>Flash Tube Power/Life</b>	Xenon, 10 W max. (100 million flashes)
	<b>Flash Duration</b>	10 to 40 μs automatically adjusts with flash rate
	<b>Lux Rating</b>	8" (20 cm) Distance = 4500 lx @ 1500 fpm, 3375 lx @ 6000 fpm with 4.5" (110 mm) irradiation diameter. 20" (50 cm) Distance = 1300 lx @ 1500 fpm, 930 lx @ 6000 fpm with 10" (250 mm) irradiation diameter.
	<b>Sensor Power Supply</b>	12 VDC (40 mA)
	<b>Low Battery Indicator</b>	Display shows all L's
	<b>Power Requirement</b>	Internal Battery Pack
	<b>Operating Temperature Range</b>	32 - 104°F (0 - 40°C )
	<b>Product Weight</b>	2.5 lb (1.1 kg)
	<b>Package Weight</b>	8.5 lbs (3.86 kg) includes external battery pack
	<b>Dimensions</b>	7.28"L x 4.72"W x 4.72"H (185 mm x 120 mm x 120 mm)
	<b>Warranty</b>	2-Year
	<b>Included Accessories</b>	AC charger/adapter, external battery pack, flash tube removal tool, handle

### Ordering Details

<b>DT-315AEB</b>	Heavy duty, external rechargeable battery powered stroboscope
<b>NIST-STROBE</b>	NIST traceable certificate for digital stroboscopes, includes data

### Accessories

<b>BP-100</b>	Replacement external battery pack
<b>FLASHTUBE-311-2</b>	Replacement flash tube
<b>CABLE-311-10FT</b>	Input/output cable
<b>SG-300</b>	Rubber strobe guard



**DT-315AEB**  
Viewing Machinery

**NIDEC-SHIMPO CORPORATION**

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