

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

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DT-315AEB Specifications

Internal Mode	Flashing Range	40.0 - 35,000 FPM (flashes per minute)
	Accuracy	±0.01% of reading
	Resolution	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
	Phase Shift	Use +/- push buttons (360° in 6 seconds)
	Display Update Time	0.2 sec approx
	Output Signal	Synchronous, 400 msec. Pulse output, 0 to +12 VDC amplitude(approx.), 4.7 KΩ impedance
	Rate Multiplier/Divider	154 mJoules per flash
External Mode	Flashing Range	0.0 - 35,000 FPM
	Accuracy	±0.01% ±1 digit
	Phase Shift	0 - 359° with 1° resolution
	Delay Time	0 - 2,000 msec from 40 - 10,000 FPM
	External Trigger Input Signal	LO level: 0 - 0.8 VDC, HI level: 2.5 - 12 VDC or open collector (NPN), pulse width 50 msec min.
	Input Impedance	4.7 KΩ at 12 V / 6.8 KΩ at 0 V
General	Display	5 digits, 0.4" (10 mm) high, LED
	Flash Tube Power/Life	Xenon, 10 W max. (100 million flashes)
	Flash Duration	10 to 40 μs automatically adjusts with flash rate
	Lux Rating	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.
	Sensor Power Supply	12 VDC (40 mA)
	Low Battery Indicator	Display shows all L's
	Power Requirement	Internal Battery Pack
	Operating Temperature Range	32 - 104°F (0 - 40°C)
	Product Weight	2.5 lb (1.1 kg)
	Package Weight	8.5 lbs (3.86 kg) includes external battery pack
	Dimensions	7.28"L x 4.72"W x 4.72"H (185 mm x 120 mm x 120 mm)
	Warranty	2-Year
	Included Accessories	AC charger/adaptor, external battery pack, flash tube removal tool, handle

Ordering Details

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

Accessories

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



DT-315AEB
Viewing Machinery

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