

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

| | | |
|----------------------|--------------------------------------|---|
| 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/adapter, 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

SEALS USA, Inc.

Instruments Division

Tel: (630)924-7138

Email: support@seals-usa.com