

DT-365E LED Portable Stroboscopes

High-Intensity, Battery Powered LED Stroboscopes. The DT-365E High-Intensity, Battery Powered LED Stroboscopes are velocity analyzing and measuring devices that are ideal for machinery process inspection. The DT-365E Stroboscopes are capable of flashing their LED lights in a synchronous frequency to the operating machinery, creating the illusion of viewing slowed or frozen images. Utilizing this phenomenon of slowing or stopping the motion with the adjusted flash rate of its LED lights, machine parts and processes may be inspected for defects, aiding in preventative maintenance programs. This LED technology extends operation due to the low energy requirement of the light diodes compared with xenon lit stroboscopes. Proper operation is assured as concern of light failure during usage common with xenon bulbs, is eliminated. The light output (Lux) of the LED's is far brighter than xenon powered stroboscopes with its array of 6 LED's.

The operation panel is a vibrant red LED display that is ideal for viewing in dark locations. The simple to use keypad plus rate adjustment dial aids in making quick changes of the flash rate to coincide with changes in the speed of your process. The dial allows fine-tune altering of the flash rate while the $\times 2/\div 2$ keys enable large spanning over the entire flash range.

The DT-365E's have the added feature of modifying the flash duration or on time which aids in picture clarity often necessary in printing processes. The phase shift function is ideal for rotating equipment where the user needs to change the focus on different blades, gears, or section of the machinery. These stroboscopes are also capable of being synchronized with an input signal. The robust aluminum housing is NEMA-4X (IP65) protected allowing usage in harsh plant environments. The DT-365E's array of 6 LED's allows continuous operation from 3 to 8 hours depending on user settings.

Typical applications for the DT-365E are to determine speeds, inspect rotors, meshing gears, motors, textile equipment, printing production lines, conveyors, industrial fans, pump operation, vibration equipment diagnostics and many more.



Features

- Extraordinary durability with extruded aluminum, NEMA 4X (IP65) construction
- Bright LED display and simple controls aid in user operation
- Long Lasting, quick-charge NiMH rechargeable battery provides exceptional usage reliability
- Phase shift (in degrees of delay time) enables visual analysis of rotating or reciprocating objects through all points of motion/time/angle
- Flash controller dial permits accurate adjustments to the flash rate
- LED technology greatly extends operation life and eliminates need to replace burned out bulbs
- Capable of being synchronized with input signal from sensor or controller

Easy Operation Control



LED

Display

Dial

Input
Signal

Battery Power
Connection

MODE

Select between Flash Mode or Flash Duration and phase shift settings

$\times 2/\div 2$

Multiply or divide Flash Rate Setting by X2 or $\div 2$

DT-365E Specifications

Range FPM (RPM)	60-120,000; From Input Signal 40-35,000
Accuracy	±0.02% of reading
Lux Rating (Approx.)	6000 FPM & 3.6° (100 μs): Distance 8" (20 cm) 10,000 lx with 8.25" (210 mm) irradiation dia.; Distance 20" (50 cm) 2075 lx with 10" (250 mm) irradiation dia. 1500 FPM & 3.6° (400 μs): Distance 8" (20 cm) 9750 lx with 8.25" (210 mm) irradiation dia.; Distance 20" (50 cm) 2050 lx with 10" (250 mm) irradiation dia.
Lamp Lifetime	Typ. 50,000 hours. Varies depending on usage.
Display	6 digit Red LED
Resolution	Internal Mode 1 FPM. External Mode 0.1 FPM
Flash Duration	0.1 to 3.6°
Phase Shift	0 to 359°
Power Requirement	100 to 230 VAC to included AC power adapter
Battery	NiMH battery requires approximate 2.5 hour recharge time
Battery Life	Approx. 3 hrs. with flash duration set to 3.6° & 8 hrs. when duration set to 1.0°
Synchronization Input Signal	NPN Open Collector 12-24 VDC
Input Signal Range FPM (RPM)	40 - 35,000
Input Signal Flash Delay FPM (RPM)	60-10,000
Input Signal	NPN open collector DC30V, 50 mA
Temperature Limits	32 to 95°F (0 to 35°C)
Humidity Limits	35 to 85% RH
Protection Class	NEMA 4X (IP65)
Product Weight	4.6 lbs (2.1 kg)
Package Weight	6 lbs (2.72 kg)
Approvals	RoHs
Warranty	2 year
Included Accessories	AC power adapter, flash-light style attachable handle

Ordering Details

DT-365E	High Intensity Portable LED Stroboscope with Rechargeable Battery
SAS-360	Flexible swing arm for DT-361, DT-365, DT-365E LED Stroboscopes
SAS-360BASE	SAS-DT360 Mounting base
NIST-STROBE-IN	NIST traceable certificate of calibration for stroboscopes

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