

DIGITAL STROBOSCOPES

DT-311A

Exceptional ruggedness and reliability

Shimpo's dual function stroboscopes provide the illusion of "stopped motion": by adjusting the strobe's flash rate, equipment and printing appear to be standing still or in slow motion. Our strobes also 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, our strobes provide timely data on vibrating parts, leaks, spray patterns and a variety of industrial and scientific operations.

Don't be fooled... while the **DT-311A** stroboscope is extremely easy to operate via its lightweight and compact design, its rugged metal construction provides unequaled reliability in the harshest environments.

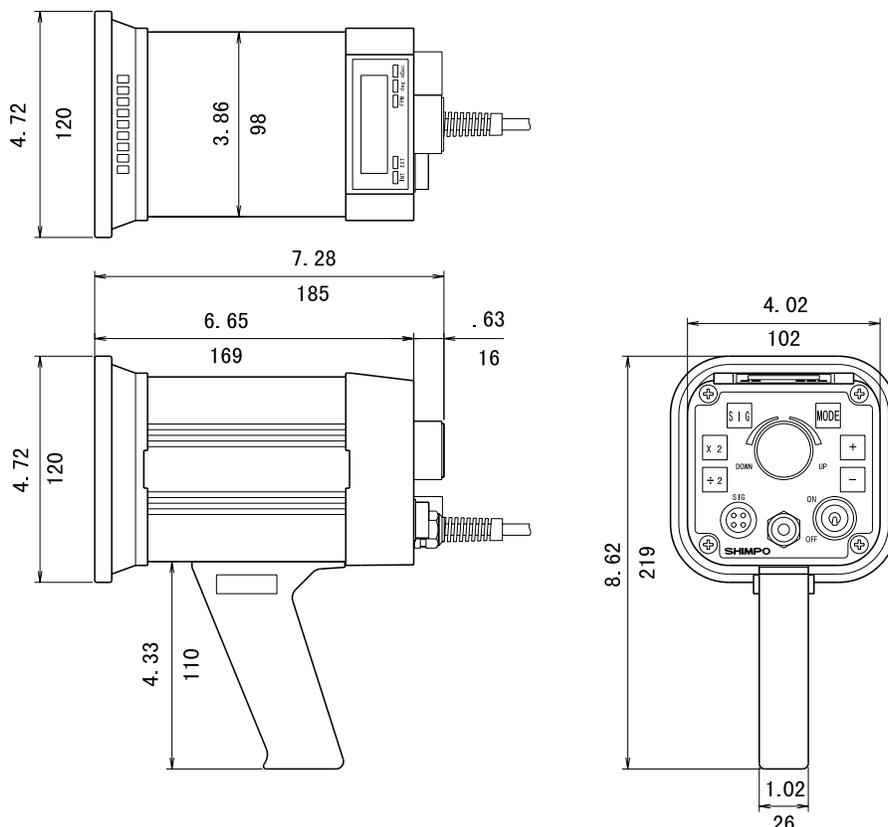


DT-311A

Features	Benefits
Extruded aluminum construction	Rugged and durable; assures reliable service
Highly accurate ($\pm 0.01\%$ of reading)	Ideal for QC inspection and process control
Phase shift (in degrees of delay time)	Enables visual analysis of rotating reciprocating objects through all points of motion/time/angle
High flash rate (up to 35,000 FPM)	Fits most industrial specialty applications
Microprocessor-controlled	Assures top performance in volatile temperature environments
External trigger	Automatically synchronizes unit with equipment
Synchronous output	Permits unit to power other strobes
Flash timer control	Maximizes flash tube life
Continuous duty cycle	Eliminates downtime waiting for unit to cool
Highly polished focused reflector	Prevents "blind" viewing areas
Manual flash controller knob	Allows easy/accurate flash rate adjustments



STOP ACTION PHOTOGRAPHY
Motion Inspection



SPECIFICATIONS

DT-311A

INTERNAL MODE				
Flashing Range	40.0 - 35,000 FPM (flashes per minute)			
Accuracy	±0.01 % of reading			
Resolution	0.1 FPM : 40.0 - 5,000 FPM	0.2 FPM : 5,000 - 8,000 FPM	0.5 FPM : 8,000 - 10,000 FPM	1 FPM : 10,000 - 35,000 FPM
Phase Shift	Use +/- push buttons (360° in 6 seconds)			
Display Update Time	0.2 seconds approx.			
Output Signal	Synchronous, 400 μsec. Pulse output, 0 to +12 VDC amplitude(approx.), 4.7 KΩ impedance			
Rate Multiplier/Divider	Multiply by 2, divide by 2			
EXTERNAL MODE				
Flashing Range	0.0 to 35,000 FPM			
Accuracy	±0.01 % ±1 digit			
Phase Shift	0 to 359° with 1° resolution			
Delay Time	0 to 2,000 μsec 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 μsec min.			
Input Impedance	4.7 KΩ to 12 V / 6.8 KΩ to 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 - 40 μsec			
Sensor Power Supply	12 VDC (40 mA)			
Low Battery Indicator	N/A			
Power Requirement	115 VAC or 220 VAC ±10 % 60/50 Hz, 30 VA (specify voltage)			
Operating Temperature Range	32° - 104°F (0 - 40°C)			
Weight	2.6 lb (1.2 kg)			
Dimensions	7.28" L x 4.72" W x 4.72" H (185 mm x 120 mm x 120 mm)			
Warranty	1 year			
Optional Accessories	Carrying case, sensors (RS-220HR), SG-300 strobe guard			