

SHIMPO Handheld Stroboscopes

DT-311A AC Powered Stroboscope

The DT-311A heavy duty, AC-powered stroboscope provides the illusion of “stopped motion” by adjusting the strobe’s flash rate, causing the equipment to appear to be standing still or in slow motion. The DT-311A also measures rotational (RPM) or reciprocating (strokes per minute) speeds with the same precision as an electronic digital tachometer. The DT-311A stroboscope is ideally suited for printing inspection, motion analysis, preventive maintenance and speed measurement of repetitive motion. The DT-311A strobe provides timely data on vibrating parts, leaks, spray patterns and a variety of industrial and scientific operations. The unit is extremely easy to maneuver and operate via its lightweight and compact design and simplified user interface. Its rugged metal construction provides unequalled reliability in the harshest environments.

Features

- Aluminum construction provides exceptional durability
- Highly polished and focused reflector eliminates “blind” viewing areas
- External trigger allows unit to be automatically synchronized with equipment*
- Continuous duty cycle eliminates need to shut down for cooling
- Phase shift allows visual analysis of rotating/reciprocating objects
- High accuracy (±0.01% of reading) is ideal for QC inspection and process control
- Synchronous output enables strobe to drive other strobes*
- Flash timer control conserves flash tube life
- Easy tripod or permanent mounting with 1/4-20 UNC x 5/16 in. deep integral mounting thread • Grounded power cord, 9-feet long
- 2-year warranty

* Requires additional cables and / or accessories not available from AutomationDirect. Contact Shimpo Instruments at (800) 237-7079 or www.shimpoint.com/contact-us

DT-311A Specifications	
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: 5,001 - 8,000 FPM 0.5 FPM: 8,001 - 10,000 FPM 1 FPM: 10,001 - 35,000 FPM
Display Update Time	0.2 seconds approximate
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 Accuracy	±0.01 % ±1 digit
Phase Shift	0 to 359° with 1° resolution
Delay Time	0 to 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 µsec min.
Input Impedance	4.7 KΩ to 12 V / 6.8 KΩ to 0 V
Display	5 digit, 0.4 in. (10 mm) high, LED
Flashtube Power/Life	Xenon, 10 W max. (100 million flashes)
Flash Duration	10 - 40 µsec
Sensor Power Supply	12 VDC (40 mA)
Power Requirement	115 VAC ±10% 60/50 Hz, 30 VA
Operating Temperature	32 - 104°F (0 - 40°C)
Weight	2.6 lbs (1.18 kg)
Dimensions	7.28 in. L x 4.72 in. W x 4.72 in. H (185 mm x 120 mm x 120 mm)
Agency Approvals	CE
Construction	Aluminum



DT-311A

DT-311A AC Powered Stroboscope		
Part Number	Description	Price
DT-311A	Heavy-duty digital stroboscope, 120VAC input, 5-digit LED display	

Accessories

DT-311A Series Accessories		
Part Number	Description	Price
DT-CARRYING-CASE	Carrying case for DT-311A or DT-315A stroboscopes	
FLASHTUBE311-2	Replacement flashtube for DT-311A or DT-315A stroboscopes	
DT-SG-300	Rubber strobe guard for DT-311A or DT-315A stroboscopes	



DT-CARRYING-CASE

SHIMPO Handheld Stroboscopes

DT-315A Rechargeable Stroboscope

The DT-315A heavy duty, rechargeable battery powered stroboscope possesses the same great features of the DT-311A with the added convenience of total portability via its own internal power supply. The quick recharge battery lasts up to two hours of full continuous usage at its high intensity flash rate. The DT-315A provides power flexibility by utilizing either its rechargeable internal battery or AC line power when plugged into the included AC adapter/charger unit. These features make the DT-315A ideal for quality inspection and preventive maintenance of automated motion equipment.

Features

- Internal, fast-charging rechargeable battery supply
- Aluminum construction provides exceptional durability
- Highly polished and focused reflector eliminates “blind” viewing areas
- External trigger allows unit to be automatically synchronized with equipment*
- Continuous duty cycle eliminates need to shut down for cooling
- Phase shift allows visual analysis of rotating/reciprocating objects
- High accuracy (±0.01% of reading) is ideal for QC inspection and process control
- Synchronous output enables strobe to drive other strobes.*
- Flash timer control conserves flash tube life
- Easy tripod or permanent mounting with 1/4-20 UNC x 5/16 in. deep integral mounting thread
- 2-year warranty

* Requires additional cables and / or accessories not available from AutomationDirect. Contact Shimpo Instruments at (800) 237-7079 or www.shimpoint.com/contact-us



DT-315A

DT-315A Specifications	
Flashing Range	40 - 35,000 FPM (flashes per minute)
Accuracy	±0.01 % of reading
Resolution	0.1 FPM: 40.0 - 5,000 FPM 0.2 FPM: 5,001 - 8,000 FPM 0.5 FPM: 8,001 - 10,000 FPM 1 FPM: 10,001 - 35,000 FPM
Display Update Time	0.2 seconds approximate
Output Signal	Synchronous, 400 µsec Pulse output, 0 to +12 VDC amplitude (approx.), 4.7 K Ω impedance
Rate Multiplier / Divider	Multiply by 2, Divide by 2
External Mode Accuracy	±0.01 % ±1 digit
Phase Shift	0 to 359° with 1° resolution
Delay Time	0 to 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 µsec min.
Input Impedance	4.7 KΩ to 12 V / 6.8 KΩ to 0 V
Display	5 digit, 0.4 in. (10 mm) high, LED
Flashtube Power/Life	Xenon, 10 W max. (100 million flashes)
Flash Duration	10 - 40 µsec
Sensor Power Supply	12 VDC (40 mA)
Battery Life	1 - 2 hours depending on flash rate
Power Requirement	Rechargeable Battery or AC Line Power with included AC adapter
Operating Temperature	32 - 104°F (0 - 40°C)
Weight	4.4 lbs (2 kg)
Dimensions	9.84 in. L x 4.72 in. W x 4.72 in. H (250 mm x 120 mm x 120 mm)
Agency Approvals	CE
Construction	Aluminum

DT-315A Rechargeable Stroboscope		
Part Number	Description	Price
DT-315A	Heavy-duty digital stroboscope, battery powered with 120VAC charger, 5-digit LED display	

Accessories

DT-315A Series Accessories		
Part Number	Description	Price
DT-CARRYING-CASE	Carrying case for DT-311A or DT-315A stroboscopes	
FLASHTUBE311-2	Replacement flashtube for DT-311A or DT-315A stroboscopes	
DT-SG-300	Rubber strobe guard for DT-311A or DT-315A stroboscopes	
BAT-DT315A-P	Replacement internal battery for DT-315A stroboscope	
DT-315CHARGER	Replacement AC adapter / charger for DT-315A stroboscope, 100-240 VAC	



FLASHTUBE311-2

DT-SG-300

DT-CARRYING-CASE

BAT-DT315A-P

DT-315CHARGER

SHIMPO Handheld Stroboscopes

ST-1000 LED Stroboscope

The Shimpo ST-1000 is a Stroboscope-Tachometer with LED flash technology. This velocity analyzing and measuring device is ideal for rotational machine inspection. The stroboscope is capable of flashing the light in a synchronous frequency to the operating machinery. This creates the illusion of viewing stopped or slowed images so that machine parts and processes may be inspected for defects. Plus, the rotational speed of the machinery and systems may be recorded for further performance analysis.

The ST-1000 is adjustable in either coarse or fine step flash-rate tuning. The backlit display shows the current flash rate, 10 user-stored pre-set flash rates, as well as a low battery warning. The backlit feature can be switched off to save battery life if desired. The ergonomic, handheld device is made of sturdy ABS plastic and comes with batteries and protective carrying case. The LED technology extends operation due to the low energy requirement of the light diodes compared with xenon stroboscopes. Typical applications for the ST-1000 are to inspect rotors, meshing gears, vibration diagnostic equipment, textile equipment, printing production lines, power tools, speaker acoustical analysis, fan balancing and many more.



ST-1000

ST-1000 Specifications	
Range	60 - 40,000 FPM (flashes per minute)
Accuracy	± 0.05% FS
Lux Rating	650 Lux @ 3000 RPM & 3.9 in (10 cm) 350 Lux @ 3000 RPM & 7.9 in (20 cm) 185 Lux @ 3000 RPM & 11.8 in (30 cm)
Display	5 digit with backlight 40000 maximum reading
Resolution	< 1000 FPM: 0.1 FPM > 1000 FPM: 1 FPM
Tuning	<1000 FPM: Coarse=10 FPM increments; Fine= 0.1 FPM increments. >1000 FPM: Coarse=100 FPM increments; Fine= 1 FPM increments
Rate Storage	10 stored user-defined flash rates. Factory Defaults: 4000, 8000, 12000, 16000, 20000, 24000, 28000, 32000, 36000, 40000.
Power Supply	(4) AA alkaline batteries
Operating Temperature	32 - 104°F (0 - 40°C)
Housing	ABS plastic
Dimensions	7.7 in. L x 2.9 in. W x 1.5 in. H (195 mm x 73 mm x 38 mm)
Weight	Approx. 0.44 lb (0.2 kg)
Included Accessories	Protective carrying case, (4) AA batteries
Agency Approvals	CE

ST-1000 LED Stroboscope		
Part Number	Description	Price
ST-1000	Portable LED stroboscope, disposable battery powered, 5-digit backlit LCD display	

