Xenon tube, + Laser photo Tachometer, ACV power

STROBOSCOPE

Model : DT-2289

ISO-9001, CE, IEC1010

www.YaLAB.com.tw 02-23890101 04-22270088

Features :

* Stroboscope use high intensity XENON tube.
* LCD display with back light.
* Stroboscope range : 100 to 10,000 RPM.
* External trigger for stroboscope.
* Photo tachometer range : 10 to 99,999 RPM.
* Photo tachometer use the laser light beam.
* DCV power supply via external AC/DC adapter included)

Lutron

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The Art of Measurement

+ Laser Photo Tachometer, Contact Tachometer

COMBINATION STROBOSCOPE

Model : DT-2289

1. FEATURES

* Combination Stroboscope with 3 functions : Digital Stroboscope, Laser Photo Tachometer, Contact Tachometer (optional probe), 3 in 1 , intelligent function.
* The Digital Stroboscope is used the microprocessor circuit design, high accuracy, digital readout, light duty, that is ideal for inspecting and measuring the speed of moving gears, fans, centrifuges, pumps, motors and other equipment used in general industrial maintenance, production, quality control, laboratories and as well as for schools and colleges for demonstrating strobe action.
* Back light high visible LCD display gives exact reading with no guessing or error and saves battery energy.
* High precision both for Stroboscope and Tachometer measurement.
* Xenon flash tube with plug and socket, easy to make the tube replacement.
* Use an exclusive one chip MICRO-PROCESSOR LSI-circuit and crystal time base to offer high accuracy measurement & fast measuring time.
* Wide measuring range.
* Stroboscope build in external trigger input.
* Long distance Laser Photo Tachometer build in.
* Stroboscope use high bright xenon tube.
* Optional Contact Tachometer probe is available.
* Compact and heavy duty housing case.

2-1 General Specifications

Display	5 digits (0 to 99999) LCD display.
Circuit	Exclusive one-chip design microprocessor LSI circuit.
Measurement	*Stroboscope* Unit : FPM (rotation per minute). build in external trigger input.
	Laser Photo Tachometer Unit : RPM (rotation per minute).
	Contact Tachometer Unit : RPM (rotation per minute). Surface speed (ft/min., m/min) * It should cooperate with optional contact probe (TA-35).
Sampling Time	Approx. 1 second.
Calibration	Crystal time base and microprocessor circuit, no external calibration process required.
Operating Temperature	0 to 50 ℃ (32 to 122℉)
Operating Humidity	Less than 80% R.H.
Power Supply	AC(100V to 240V) to DC 9V (3A) adapter.
Power Consumption	*Stroboscope (3600 FPM) :* DC 2.4 A.
	Laser photo Tachometer (3600 RPM) : DC 50 mA.
Weight	1 Kg (2.2 LB).
Dimensions	21 cmx12 cmx12 cm (8.3"x4.8"x4.8").
Accessories Included	Operation manual.....1 PC. AC(100V to 240V) to DC 9V adapter .....1 PC. Reflective tape..... 1 PC.
Optional Accessory	Contact Tachometer probe ..... Model : TA-35 Flash Xenon tube.....Model : TBXE-2289

2-2 Electrical Specifications of Stroboscope

Stroboscope Specification	
Stroboscopic Flash Rate	100 to 15,000 flashes per minute (FPM). Low range : 100 to 1,000 RPM/FPM. High range : 1000 to 15,000 RPM/FPM.
Accuracy	± (0.05% + 1 digit).
Resolution	0.1 FPM/RPM (less than 1,000 FPM/RPM) 1 FPM/RPM (> 1,000 FPM/RPM).
External Trigger Input	Input signal : 5V to 30 V rms, 5 to 15,000 RPM/FPM.

Flash Tube Specification	
Flash tube	Xenon lamp.
Flash Duration	Approximately 60 to 1,000 microseconds.
Flash color	Xenon white 6,500 K degree.
Flash energy	4 Watts-seconds (joules).
Beam Angle	80 degrees.
Flash tube replacement	It is required to change the flash tube when the instrument start to flash irregularly at speeds of 3600 RPM/FPM or more. Flash tube with plug and socket, easy to make the replacement.
Operating duty Cycle	For prolong life and safety, please adhere to the following operation duty cycle: < 2000 RPM - 2 hours 2000 to 3600 RPM - one hour 3601 to 8000 RPM - 30 minutes > 8000 RPM - 10 minutes. ** 10 min. cooling off period between cycles.*

2-3 Electrical Specifications of Laser Photo Tachometer

Range	10 to 99,999 RPM	
Accuracy	± (0.05% + 1 digit).	
Sampling Time	1 sec. (60 RPM).	
Photo Tachometer detecting distance	50 - 2,000 mm typically. ** Spec. of detecting distance are that under the size of reflecting tape is 10 mm square & the measuring RPM value is 1,800 PPM. The max. & min. detecting distance may change under different environment, different reflecting tape or the measuring RPM beyond 1800 PRM.*	
Resolution	0.1 RPM	< 1,000 RPM
	1 RPM	≧1,000 RPM
Time base	Quartz crystal	
Laser light source	* Less than 1 mW. * Class 2 laser diode. Red. Wave length is 645 nm approximately.	
source	* Class 2 laser diode. Red. Wave length is 645 nm approximately.	

2-4 Electrical Specifications of Contact Tachometer (Optional Probe, TA-35)

Range	*Contact Tachometer :* 0.5 to 19,999 RPM *Surface Speed (m/min.) :* 0.05 to 1,999.9 m/min. *Surface Speed (ft/min.) :* 0.2 to 6,560 ft/min.	
Accuracy	± (0.05% + 1 digit).	
Sampling Time	1 sec. (6 RPM).	
Resolution	0.1 RPM	< 1,000 RPM
	1 RPM	≧1,000 RPM
	0.01 m/min.	≧ 100 m/min.
	0.1 m/min.	> 100 m/min.
	0.1 ft/min.	< 1000 ft/min.
	1 ft/min.	≧ 1,000 ft/min.
Accessories Included	RPM adapter (CONE)..... 1 PC. RPM adapter (FUNNEL)..... 1 PC. Surface speed test wheel..... 1 PC.	

* Appearance and specifications listed in this brochure are subject to change without notice.

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