

Type k Temp., Pt 1000 ohm Temp., IR Temp.

# TACHOMETER/ STROBOSCOPER

Model : DT-2436

ISO-9001, CE, IEC1010

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02-2389-0101



Photo Tach Contact Tach

Surface speed

Stroboscope

Type k thermometer

Pt 1000 ohm Temp.

IR Temp .



**Lutron**

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*The Art of Measurement*

Multi-functions

**ELEVATOR TACHOMETER with Stroboscops**

**FEATURE**

* Multi-functions, one instrument combine Photo Tachometer (RPM, rev/s) ,Stroboscope & Contact Tachometer ( RPM, rev/s,m/min.,m/s,cm/s,km,m,km/h,ft/min.,in/min. ) Type K Thermometer, Pt 1000 Thermometer. IR Temp.
* High intensity white light beam for photo tachometer,safety and save the power energy.
* Wide measuring range from 0.5 to 99,999 RPM.
* 0.5 RPM resolution for the measured value < 1000RPM.
* High precision with 0.05% accuracy.
* The last value, max., value, min. value will be stored into the memory automatically & can be obtained by pressing REC Button.
* Large LCD display.
* High visible LCD display gives RPM reading exactly with no guessing or errors & saves battery energy.
* This tachometer used the exclusive one chip MICRO-COMPUTER LSI circuit & crystal time base,offer the high accurate measurement & fast sampling time.
* The use of durable, long lasting components, including a strong, light weight ABS plastic housing, assures almost maintenance free performance for many years.
* The housing cabinet has been carefully shaped to fit comfortable in either hand.

**General Specifications**

Display	43 mm x 33 mm LCD, 5 digits. 5 digits with display unit.
Measurement	Photo Tachometer : (RPM, rev/s ) Contact Tachometer : ( RPM, rev/s,m/min.,m/s,cm/s, km,m,km/h,ft/min.,in/min. ) Stroboscope Type K Thermometer,Pt 1000 Thermometer. IR Thermometer
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50 °C ( 32 to 122 °F )
Over Input Display	Indication of "-----"
Power Supply	UM3-AA X 4 ( DC 4.5 V battery )
Power Consumption	Approx. DC 52 mA
Weight	230g/0.50LB (Meter only)
Dimension	HWD 207 x 67 x 39 mm (81.5 x 26.3 x 15.3 inch).
Time base	Quartz crystal.
Circuit	Exclusive one-chip of microcomputer LSI circuit.
Memory	Last/Max./Min. value.
Accessories Included	Hard carrying case 1 PC. Reflecting tape marks ( 600 mm ) 1 PC. RPM adapter ( CONE ) 1 PC. RPM adapter ( FUNNEL ) 1 PC. Surface speed test wheel 1 PC. Operation manual 1 PC. Surface speed test wheel Connecting rod.. 1 PC.

Optional Accessories	AC to DC adapter 1 PC. USB cable (USB-01) 1 PC. RS232 cable (UPCB-02) 1 PC. Data acquisition software (SW-U801-WIN) 1 PC. Excel data acquisition software(SW-E802). 1 PC. Type K Temp. probe : TP-01 , TP-02A ,TP-03 , TP-04 TP-05 TP-1000 (Pt-1000 ohm Temp. probe.)
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### Electrical Specification ( 23 ±5 °C )

#### Photo Tachometer

Measurement & Range	Photo Tachometer :5 to 99,999 RPM.
Resolution	RPM:0.5 RPM ( < 1,000 RPM ).1 RPM ( ≥1,000 RPM ).
Accuracy	±( 0.05% + 1 digit ).
Photo Tachometer detecting distance	50 to 150 mm/2 to 6 inch. (typical max. 300 mm/12 inch, depending upon ambient light). * Spec. of detecting distance are that under the size of reflecting tape is 10 mm square & the measuring RPM value is 1,800 RPM. The max. & min. detecting distance may change under different environment, different reflecting tape or the measuring RPM beyond 1800 RPM.

#### Contact Tachometer

Mesurement unit	Mesurement Range	Resolution	Accuracy
RPM	0.5 ~ 999.5 1000 ~ 19999	0.5 1	±( 0.05% + 1 digit )
rev/s	0.008 ~ 16.658 16.658 ~ 333.31	0.008 0.01	±( 0.05% + 1 digit )
m/min.	0.05 ~ 99.95 100.0 ~1999.9	0.05 0.1	±( 0.05% + 1 digit )
cm/s	0.08 ~ 166.58 166.6 ~ 3333.1	0.08 0.2	±( 0.05% + 1 digit )
m/s	0.0008 ~ 1.6658 1.666 ~ 33.331	0.0008 0.001	±( 0.05% + 1 digit )
km	0.0000 ~ 99999	0.0001 ~ 1	±( 0.05% + 1 digit )
m	0.0008 ~ 99999	0.0001 ~ 1	±( 0.05% + 1 digit )
km/h	0.003 ~ 5.997 6 ~ 119.99	0.003 0.01	±( 0.05% + 1 digit )
ft/min.	0.1 ~ 327.8 328 ~ 6559	0.1 1	±( 0.05% + 1 digit )
in/min.	1.9 ~ 3935.0 3937 ~78736	1.9 4	±( 0.05% + 1 digit )

NOTE: When using test wheel, accuracy can be affected as much as 0.5% of reading

#### Stroboscope Tachometer

Flash adjust range	100 to 99,990 RPM/FPM. * RPM : round per minute. FPM : flash per minute.	
Resolution	0.1 RPM :< 1,000 RPM.	5 RPM : ≥ 30,000-50,000 RPM
	1 RPM : ≥ 1,000-30,000 RPM	10 RPM : ≥ 50,000-99,990 RPM
Function buttons	Digital rotate knob,x 2 button, ÷ 2 button,+ button, - button,	
Accuracy	±(0.1 % + 2d)	

**Type K thermometer**

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± ( 0.4 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.4 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )

**p t 1000 Ω thermometer**

Unit	Range	Resolution	Accuracy
°C	-10 to 70 °C	0.1 °C	± 1.2 °C
°F	14 to 158 °F	0.1 °F	± 2.2 °F

**IR thermometer**

Emissivity	0.95 fixed value
Spectral response	6 to 14 μm (wavelength)
Field of View D/S	D/S =Approx. 3 : 1 ratio (D = distance, S =spot)

Unit	Range	Resolution	Accuracy
°C	-30 to 305 °C	0.5 °C	± 3 % or ± 3 °C
°F	-22 to 581 °F	0.5 °F	± 3 % or ± 5.4 °F

Spec. is tested under the 20 cm dia. Black body, the measuring distance between the sensing head and the target is 30 cm.

\*Spec. tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.

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

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