

**Cole-Parmer® Contact Tachometers**

Multiple speed selection for maximum flexibility

- Easily switch between 16 measuring modes with front-panel dial

Dial in any one of the 16 measuring modes—these tachometers calculate the readings for you! Select the LCD model for use in direct sunlight, or choose the LED model for easy reading in dim lighting. Both models feature a large memory capacity—use the memory button to recall maximum, minimum, and the last ten readings. Low-battery indicator notifies user of battery life.



LCD model 08204-50  
LED model 08204-80

**What's included:**

6" (15.2 cm) linear speed wheel, two convex tips, one concave tip, 3½" L (8.8 cm) extension shaft, carrying case, two AA batteries, and NIST-traceable calibration report supplied by the manufacturer.



Includes tips and carrying case



**Specifications**

Mode	Ranges	Accuracy
Rev (tot)	0.1 to 9999.9, 10,000 to 99,999	—
rpm	0.10 to 999.99, 1000.0 to 9999.9, 10,000 to 25,000	±0.06, ±0.6, ±0.006% of rdg ±1 digit or 3 rpm max
In. (tot)	0.1 to 9999.9, 10,000 to 99,999	—
In./min	0.6 to 9999.9, 10,000 to 99,999	±0.6, ±0.006% of rdg or ±7 in./min
Ft (tot)	0.01 to 999.99, 1000.0 to 9999.9, 10,000 to 99,999	—
Ft/min	0.05 to 999.99, 1000.0 to 9999.9, 10,000 to 12,500	±0.06, ±0.6, ±1
Yd (tot)	0.005 to 99.995, 100.00 to 999.99, 1000.0 to 9999.9, 10,000 to 99,999	—
Yd/min	0.02 to 999.99, 1000.0 to 4167.0	±0.06, ±0.3
cm (tot)	0.5 to 9999.5, 10,000 to 99,999	—
Meter (tot)	0.005 to 99.995, 100.00 to 999.99, 1000.0 to 9999.9, 10,000 to 99,999	—
Meter/min	0.02 to 999.99, 1000.0 to 3810.0	±0.06, ±0.3

**Memory:** last 10 readings and Min/Max

**Power:** two AA batteries (included)

Description	Cat. no.	Price
Contact tachometer with LCD	<a href="#">GY-08204-50</a>	
Contact tachometer with LED display	<a href="#">GY-08204-80</a>	
Contact tachometer with LCD and 12" (30.5 cm) wheel	<a href="#">GY-23022-57</a>	
Contact tachometer with LED display and 12" (30.5 cm) wheel	<a href="#">GY-98807-37</a>	

[GY-08203-61](#) Linear speed wheel, 12" (30.5 cm)

[GY-98807-16](#) Replacement linear speed wheel, 6" (15.2 cm)

[GY-08203-70](#) Replacement convex tip

[GY-08203-71](#) Replacement concave tip

[GY-08203-72](#) Replacement extension shaft, 3½" (8.9 cm)

[GY-08203-73](#) Replacement carrying case

[GY-09376-01](#) Replacement batteries, AA. Pack of 4

[GY-17050-00](#) NIST-traceable recalibration with data

**Digi-Sense™ Precalibrated Digital Contact/Photo Tachometer**

Eliminate costly repairs

**NEW**

- Reliable measurements, guaranteed! Precalibrated to NIST-traceable standards
- Get more accurate readings with microprocessor-based design and accuracy of ±0.05%
- Easily view max, min, and last value for quick interpretation of results
- Stores up to twenty last average measurements for additional flexibility
- Large backlit display is perfect for poorly lit environments
- Durable, lightweight ABS plastic housing is ideal for industrial environments



Easily configure this tachometer for either contact or noncontact measurements depending on your application requirements. Use the included adapters in contact mode for quickly taking measurements; take measurements from a distance (19 1/16", 50 cm) when in photo mode for use on dangerous running equipment.

Meter features include Max/Min, and values stored, auto-ranging, and built-in memory recall of up to twenty last average measurements.



**What's included:** contact converter, surface speed wheel, rpm contact adapter, large male rpm rubber cone, small male rpm rubber cone, female rpm rubber cone, reflective tape (23%, 60 cm), four set screws, carrying case, four AA batteries, and NIST-traceable calibration report with data supplied by InnoCal.

**Save time, save money!**

**Choose Precalibrated**  
Includes a data-rich, ISO 17025 certificate—**no additional charge!**

Precalibrated by **INNOCAL**  
INNOVATIVE CALIBRATION SOLUTIONS



Description	Digital contact/photo tachometer	
<b>Catalog number</b>	<b>GY-20250-26</b>	
Mode	Contact	Photo
Range	0.5 to 19,999 rpm	2.5 to 99,999 rpm
Resolution	0.1 rpm (0.5 to 999.9 rpm); 1 rpm (over 1000 rpm)	0.1 rpm (2.5 to 999.9 rpm); 1 rpm (over 1000 rpm)
Accuracy	±(0.05% + 1 digit)	±(0.05% + 1 digit)
Surface speed	0.2 to 6561 ft/min; 0.05 to 1999.9 m/min	
Sampling time	0.8 second (over 60 rpm)	
Range select	Auto-range	
Time base	Quartz crystal	
Detecting distance	—	50 to 500 mm
Display	5-digit LCD with backlit display	
Dimensions (L x W x H)	8 1/4" x 2 7/8" x 1 1/2" (21 x 7.4 x 3.7 cm)	
Power	Four AA batteries (included)	
<b>Price</b>		

## Tachometers & Stroboscopes

### Cole-Parmer® Convertible Laser Tachometers

#### No more inaccurate measurements

- Accurately measure rpm from up to 14 ft (4.2 m) away!
- Stores up to 13 readings

Select the LCD model for use in bright light or the LED model for easy reading in dim light. A laser spot makes these tachometers easy to aim. Use the memory button to recall last, maximum, minimum, and ten stored readings. Tachometers feature an overrange indicator and low-battery indicator.

**What's included:** two convex rubber cone tips and one concave rubber tip to convert the laser tachometer to a contact model, a 3½" (8.9 cm) extension shaft, carrying case, reflective tape, contact adapter, two AA batteries, and NIST-traceable calibration report supplied by the manufacturer.



LCD model  
87304-00

Included adapter instantly converts your laser tachometer into a contact tachometer.

LED model  
87304-10

#### Specifications

**Maximum measuring distance:** 14 ft (4.2 m)      **Power:** two AA alkaline batteries (included)  
**Memory:** ten readings, last and min/max

Description	Tachometer with LCD	Tachometer with LED
Catalog number	<a href="#">GY-87304-00</a>	<a href="#">GY-87304-10</a>
Range	6 to 99,999 rpm	
Resolution	1 rpm	
Accuracy	±1 rpm from 6 to 8300 rpm, ±2 rpm from 8301 to 25,000 rpm ±0.006% of rdg ±1 digit (or 7 rpm max) from 25,001 to 99,000 rpm	
Price		



- [GY-08203-61](#) Linear speed wheel, 12" (30.5 cm)
- [GY-98807-16](#) Replacement linear speed wheel, 6" (15.2 cm)
- [GY-08203-70](#) Replacement convex tip
- [GY-08203-71](#) Replacement concave tip
- [GY-08203-72](#) Replacement extension shaft, 3½" (8.9 cm)
- [GY-08210-62](#) Replacement reflective tape. Roll of 5 ft
- [GY-08203-73](#) Replacement carrying case
- [GY-09376-01](#) Replacement batteries, AA. Pack of 4
- [GY-17050-00](#) NIST-traceable recalibration with data

### Laser Pocket Tachometers

#### Ergonomic design allows simultaneous viewing of both the target and display

- Nonslip, rubber grip for single-hand operation

Tachometers feature user-selectable fixed or auto-ranging resolution, memory of last reading, minimum and maximum, tripod mounting bushing for hands-free operation, target "lock on" indicator, and a low-battery indicator. **Models 08199-22 and -24** function as a totalizer/counter and a timer (stopwatch) programmable in both English and metric units. Model 08199-24 adds the functionality of measuring contact rpm and surface speed.

**What's included:** Model 08199-20 includes reflective tape. Model 08199-22 includes reflective tape and NIST-traceable calibration report supplied by the manufacturer. Model 08199-24 includes a 10-cm speed wheel, remote contact assembly with concave and convex tips, carrying case, reflective tape, and NIST-traceable calibration report supplied by the manufacturer.



Description	Optical tachometer	Laser tachometer	Laser/contact tachometer
Cat. no.	<a href="#">GY-08199-20</a>	<a href="#">GY-08199-22</a>	<a href="#">GY-08199-24</a>
Range	Optical: 5 to 99,999 rpm Contact: —	—	0.5 to 20,000 rpm
Resolution	0.001 to 1 rpm	—	0.001 to 10 rpm
Accuracy	±0.01% of reading		
Maximum measuring distance	30" (76.2 cm)	25 ft (7.6 m)	
Memory	Last reading and min/max		
Power	Two AA batteries (included)		
Price			

### Combination Tachometer/ Stroboscope

#### Two meters in one!

- Tachometer rpm, stroboscopic speed and motion analysis
- Stroboscope course and fine flash rate adjustments in three ranges
- Unique display features characters that reverse direction depending on measurement mode

**What's included:** Reflective tape, carrying case, and four AA batteries.



Model number	461825	
Catalog number	<a href="#">GY-87700-06</a>	
Mode	Tachometer	Stroboscope
Range	5 to 99,999 rpm	100 to 100,000 FPM
Resolution	0.1 rpm (<1000 rpm) 1 rpm (≥1000 rpm)	0.1 FPM (<1000 FPM) 1 FPM (≥1000 FPM)
Accuracy	±(0.1% reading + 2 digits)	
Sampling time	1 sec > 60 rpm	
Dimensions (L x W x D)	8½ x 2½ x 1½" (216 x 67 x 38 mm)	
Power	Four AA batteries (included)	
Price		

- [GY-87702-62](#) Spare reflective tape. 10 strips
- [GY-09376-01](#) Replacement batteries, AA. Pack of 4
- [GY-17050-00](#) NIST-traceable calibration with data for tachometer

## Deluxe Digital Stroboscopes

### Phase shifting models let you use your stroboscopes continuously

- View different parts of moving machinery
- High flash energy allows measurements in bright areas
- Tripod mount for extended hands-free operation



Phase-shifting stroboscope 87701-23

**Standard Digital Stroboscopes** feature an LCD readout of flashes per minute (fpm), x2 and ÷2 capacity for distinguishing actual rpm from harmonic frequencies, a memory for six flash rates, a recall function for last flash rate, and an external input and trigger output for remote synchronous operation.

**Phase-Shifting Stroboscope** shifts in 0.1° increments—view different parts of moving machinery with higher resolution and accuracy. Adjust readings by as little as 0.01 fpm. Store and recall nine full flash rate settings in nonvolatile memory—unit remembers last setting before shutoff.

**What's included:** a 6-ft (1.8-m) power cord (115 VAC models include plug) or the appropriate battery recharger, and an NIST-traceable calibration report supplied by the manufacturer.

**Digital stroboscope kits include:** a carrying case, power cord or recharger, and a spare lamp.

**Phase-shifting stroboscope kits include:** a carrying case, battery recharger/AC power supply that allows continuous operation, and a spare lamp.

### Specifications

<b>Range:</b> Standard: 30 to 20,000 fpm Phase-shifting: 30 to 50,000 fpm	<b>Flash duration:</b> 8 to 20 µs sec
<b>Resolution:</b> Standard: 0.01 fpm Phase-shifting: 0.01 to 1.0 fpm	<b>Flashtube life:</b> 100 million flashes typical
<b>Accuracy:</b> 0.002% of setting or ±1 LSD	<b>Flash color:</b> 6500 K white xenon
<b>Phase delay:</b> (phase-shifting models only): 0.1 to 359.9°	<b>Input/trigger output:</b> Standard: 3.3 VDC TTL output Phase-shifting: 3.3 VDC TTL compatible; 40 µs sec pulse-positive/negative

Power source	Stroboscope only		Stroboscope kits	
	Cat. no.	Price	Cat. no.	Price
<b>Standard stroboscope</b>				
115 VAC, 50/60 Hz	<a href="#">GY-87701-15</a>		<a href="#">GY-87701-16</a>	
230 VAC, 50/60 Hz	<a href="#">GY-87701-17</a>		<a href="#">GY-87701-18</a>	
Internal battery/115/230 VAC recharger	<a href="#">GY-87701-21</a>		<a href="#">GY-87701-22</a>	
<b>Phase-shifting stroboscope</b>				
Internal battery/115/230 VAC recharger	<a href="#">GY-87701-23</a>		<a href="#">GY-87701-24</a>	

- [GY-87000-82](#) Replacement strobe lamp. Included with kits
- [GY-87000-90](#) Latched carrying case. Included with kits
- [GY-87701-28](#) Remote optical sensor with 1/8" (0.3 cm) phone plug termination; 8-ft (2.4-m) L cable
- [GY-87701-30](#) Magnetic trigger sensor/amplifier with 8-ft L cable
- [GY-17050-10](#) NIST-traceable recalibration with data for stroboscope

## Pocket Stroboscope

### Get high performance in an affordable unit

- Internal lithium ion battery provides two hours of continuous operation
- Can operate continuously using supplied AC adapter
- Fits in pocket or can be worn on optional belt holster
- Accepts input from sensor for external flash triggering



The pocket stroboscope is a highly stable instrument for taking noncontact rpm measurements and inspecting moving parts by “freezing” or “slowing down” the action. The pocket stroboscope requires only one hand to operate, yet delivers performance comparable to much larger and more expensive “pistol-grip”-type models.

**What's included:** External triggering jack, hard-shell carrying case, universal AC adapter/charger with plug adapter, and calibration document supplied by the manufacturer.

Model number	PK2X-N
<b>Catalog number</b>	<a href="#">GY-53561-00</a>
Flash range	30 to 12,500 FPM
Flash brightness	1200 lux (@ 4500 FPM from 8" distance)
Resolution	±1 FPM over the entire range
Accuracy	±0.01% over the entire range ±1 digit
Flash energy	170 mJ maximum
Flash tube longevity	200 million flashes
External trigger	0 to 5 volt, DTL/TTL compatible 1/8" jack
Power	Rechargeable internal lithium-ion battery (2-hr run time regardless of flash rate) or universal 100–240 VAC adapter (continuous use)
<b>Price</b>	

## LED Stroboscope

### Long-lasting LED light source

**NEW**



- Push-button operation with x2 and /2 buttons for quick adjustments
- Reset quickly—stores up to nine flash rates for both FPM and Hz
- Highly stable drift-free operation provides precision accuracy
- Rugged aluminum housing withstands challenging industrial environments

**What's included:** carrying case, AC adapter/charger, and NiMH rechargeable battery.

Model number	ESL-200
<b>Catalog number</b>	<a href="#">GY-53502-08</a>
Range	12.0 to 150,000 FPM/RPM
Resolution	±0.1 FPM/RPM
Accuracy	±0.01%, ±1 LSD
Display	5-digit LCD
Dimensions (L x W x H)	7 1/2" x 3" x 1 1/8" (19 x 7.4 x 3.3 cm)
Power	NiMH rechargeable battery
<b>Price</b>	