



## Rev Up Your Diagnostics

Measure RPM, surface speed, and revolution counts with Extech tachometers. Models include contact, non-contact and combination, as well as compact, stroboscopes and panel-mount versions (see p. 116-119).



ACCESSORIES	
461937	Reflective Tape -10 strips, 23x0.25" (584x6 mm) each strip
461990	Contact Wheels - (2 sets) cone tip, flat tip, and spare wheel

**N** NIST traceable certificate with data is available when you order your meter with Certificate Traceable to NIST. Look for this symbol **N** next to product part numbers.



### 461891 Contact Tachometer

Fast and accurate RPM and surface speed measurements

- Make contact measurements of rotating objects
- Measure linear surface speeds in ft/min or m/min using three accessory wheels provided
- Recalls Last/MAX/MIN values
- Complete with cone tip, flat tip and spare wheel for surface speed measurements, four 1.5 V AA batteries, and carrying case



### 461893 Non-contact Photo Tachometer

Non-contact RPM measurements using visible light

- Make non-contact rpm measurements of rotating objects
- Use reflective tape on object to be measured and point the integral light beam
- Integral light beam has an ideal measurement range up to 6" (152 mm) distance
- Readings updated every second
- Recalls Last/MAX/MIN values
- Complete with 23" (0.6 m) reflective tape, four 1.5 V AA batteries, and carrying case

SPECIFICATIONS	461891 <b>N</b>	461893 <b>N</b>
rpm	0.5 to 20,000 rpm	5 to 99,999 rpm
ft/min	0.2 to 6560 ft/min	—
m/min	0.05 to 1999.9 m/min	—
Basic Accuracy	±0.05% rdg	±0.05% rdg
Max rpm Resolution	0.1 rpm	0.1 rpm
Laser	—	—
Temperature (IR)	—	—
CE approved	Yes	Yes
Dimensions	6.7x2.8x1.5" (170x27x37 mm)	6.7x2.8x1.5" (170x27x37 mm)
Weight	9.2 oz (260 g)	8.8 oz (250 g)
Warranty	2 years	2 years



**461895**  
**Combination**  
**Contact/Photo**  
**Tachometer**

Combines both contact and non-contact measurements for use in all applications

- Uses visible light to read up to 6" (150 mm) from target
- Characters on display reverse direction depending on contact or photo mode
- Memory/readings button holds last reading for 5 min and recalls min/max readings
- Complete with wheels for linear surface speed or rpm measurements, four 1.5 V AA batteries, 23" (0.6 m) reflective tape, and carrying case



**461995**  
**Combination**  
**Contact/Laser**  
**Photo Tachometer**

Combines both contact and non-contact measurements for use in all applications

- Laser guided for greater distance non-contact measurements up to 6.5 ft (2 m)
- Characters on display reverse direction depending on contact or photo mode
- Memory/readings button holds last reading for 5 min and recalls MAX/MIN readings
- Complete with wheels for linear surface speed or rpm measurements, four 1.5 V AA batteries, 23" (0.6 m) reflective tape, and carrying case



**RPM10**  
**Combination**  
**Laser Tachometer**  
**+ IR Thermometer**

Photo/Contact Tachometer includes a non-contact IR Thermometer for surface temperature measurements

- Built-in IR thermometer with laser measures remote surface temperature on motors and rotating parts
- Fixed 0.95 emissivity, 6:1 distance to target ratio
- Non-contact Photo tachometer uses a Laser for greater measuring distance up to 6.5 ft (2 m)
- Contact tachometer for RPM and surface speed measurements
- Recalls Last/MAX/MIN values
- Characters on display reverse direction depending on mode
- Complete with tips/wheel, four 1.5 V AA batteries, reflective tape, and carrying case

461895 N	461995 N	RPM10 N	SPECIFICATIONS
Photo: 5 to 99,999 rpm Contact: 0.5 to 19,999 rpm	Photo: 10 to 99,999 rpm Contact: 0.5 to 19,999 rpm	Photo: 10 to 99,999 rpm Contact: 0.5 to 20,000 rpm	rpm
0.2 to 6560 ft/min	0.2 to 6560 ft/min	0.2 to 6560 ft/min	ft/min
0.05 to 1999.9 m/min	0.05 to 1999.9 m/min	0.05 to 1999.9 m/min	m/min
±0.05% rdg	±0.05% rdg	±0.05% rdg	Basic Accuracy
0.1 rpm	0.1 rpm	0.1 rpm	Max. rpm Resolution
—	Yes	Yes	Laser
—	—	-4 to 600°F (-20 to 315°C)	Temperature (IR)
Yes	Yes	Yes	CE approved
8.5x2.6x1.5" (216x66x38 mm)	8.5x2.6x1.5" (216x66x38 mm)	8.5x2.6x1.5" (216x66x38 mm)	Dimensions
10.6 oz (300 g)	10.6 oz (300 g)	10.6 oz (300 g)	Weight
2 years	2 years	2 years	Warranty

**461920 Laser Photo Tachometer Counter**



Measures the speed (RPM) of rotating objects and counts (revolution) of moving objects.

CE

**Non-contact RPM and Revolution count measurements to 99,999 rev**

- Measure non-contact RPM readings of rotating objects by pointing the integral laser at the reflective tape placed on the object to be measured
- Large 5 digit LCD display with backlighting
- Rugged double molded housing with memory button for Last/MAX/MIN readings
- 2-year warranty
- Complete with 9 V battery and reflective tape

**SPECIFICATIONS**

RPM range	2 to 99,999 rpm
Count range	1 to 99,999 rev (revolution)
Target Distance	1.6 ft (500 mm)
Basic Accuracy	±0.05%
Resolution	0.1 rpm, 1 count
Dimensions/Weight	6.2x2.3x1.6" (160x60x42 mm)/5.3 oz (151 g)

**ORDERING**

461920 <b>N</b>	Laser Photo Tachometer Counter
461937	Spare reflective tape (23" each strip), 10 pk

**RPM33 Combination Contact/Laser Photo Tachometer**



Contact RPM measurement



Laser Photo RPM measurement

CE

**Quickly measure RPM, surface speed and length with one tool. Use the contact wheel for up-close readings or laser mode for non-contact readings.**

- Laser guided for greater distance non-contact measurements up to 1.6 ft (500 mm)
- Store/recall 10 data sets in memory with 4 parameters (measurement/max/min/avg)
- Large 5 digit backlit LCD display
- Microprocessor based with quartz crystal oscillator to maintain high accuracy
- Provides wide RPM (photo and contact) and Linear Surface Speed/Length (contact) measurements
- 2-year warranty
- Complete with contact wheel, batteries, reflective tape, and case

**SPECIFICATIONS**

Range (rpm)	Photo: 2 to 99,999 rpm; Contact: 2 to 20,000 rpm
Surface Speed	
inches/min	0 to 78,720 inches/min
ft/min	0 to 6560 ft/min
yards/min	0 to 2186 yards/min
m/min	0 to 2000 m/min
Length	
inches	3.9 to 39370"
feet	0.3 to 3280 ft
yards	0.1 to 1093 yards
meters	0.1 to 1000 m
Frequency (Hz)	333 Hz
Accuracy	0.05% rdg +1 digit
Sampling Time	0.5 Sec > 120 rpm
Resolution	0.1 rpm (<10,000 rpm); 1 rpm (>10,000 rpm)
Dimensions / Weight	6.2x2.3x1.6" (160x60x42 mm) -without contact wheel/5.3 oz (151 g)

**ORDERING**

RPM33 <b>N</b>	Combination Contact/Laser Photo Tachometer
461937	Spare reflective tape (23" each strip), 10 pk

**461825 Combination Photo Tachometer/Stroboscope**



CE

**Stroboscope to analyze rotating objects and Tachometer to measure rpms**

- Course and fine flash rate adjustments to freeze and analyze rotating objects
- Unique display characters that reverse direction depending on function mode
- Large 0.4" (10 mm) 5 digit LCD display and memory stores Last/MAX/MIN readings
- Complete with four 1.5 V AA batteries, reflective tape, and case; 2-year warranty

SPECIFICATIONS	PHOTO TACHOMETER (RPM)	STROBOSCOPE (FPM/RPM)
Range	5 to 99,999 rpm	100 to 100,000 fpm/rpm
Accuracy	±0.1% rdg	±0.1% rdg
Sampling Time	1 sec ≥ 60 rpm	1 sec ≥ 60 rpm
Resolution	0.1 rpm (<1,000 rpm), 1 rpm (≥1,000 rpm)	0.1 fpm (<1,000 fpm), 1 fpm (≥1,000 fpm)
Dimensions/Weight	8.5x2.6x1.5" (215x65x38 mm)/10.6 oz (300 g)	

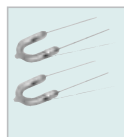
**Ordering**

461825	<b>N</b>	Combination Photo Tachometer/Stroboscope
461937		Spare reflective tape (23" each strip), 10 pk

**461830/461831 Digital StroboTach**



CE



461834

**Freeze motion and analyze rotating objects without contact**

- Checks and analyzes motion and speed by simply aiming and synchronizing its flash rate (fpm) with a rotating object
- rpms on 4-digit LED display
- Flash/Speed Rate of 100 to 10,000 fpm/rpm; Basic accuracy of ±0.05% rdg
- Duty Cycle of 5 to 30 mins
- Tripod mount for stationary use
- Dimensions/Weight: 8.3x4.8x4.8" (211x122x122 mm)/2.2 lbs (1 kg)
- Complete with 6 ft (1.9 m) power cord and handle; 2-year warranty

**ORDERING**

461830	<b>N</b>	Digital StroboTach 115 V AC, 60 Hz
461831	<b>N</b>	Digital StroboTach 220 V AC, 50 Hz
461834		Spare Xenon Lamp (est. life 300 hrs), 2 pk

**461950 1/8 DIN Panel Tachometer**



CE



461957  
Photoelectric



461955  
Proximity



**Continuous & accurate readings from 5 to 99,990 rpm**

- Large LED display updates 1/sec (rpm<60)
- Unique design permits rpm measurements of a one hole gear or disk eliminating the need for special gears
- A pulse is measured when a ferrous object (stud) passes by a proximity sensor
- Choice of two sensor pickup types (both include 6 ft/1.8 m cable):  
Proximity sensor: 0.1" (3 mm) target distance, range up to 36,000 rpm (600 Hz);  
Photoelectric sensor: 0.4" (10 mm) target distance, range up to 6000 rpm (100 Hz)
- 2-year warranty

**SPECIFICATIONS**

rpm	5 to 99,990 rpm
Basic accuracy	±0.05%
Resolution	0.1 rpm (5 to 1000 rpm), 1 rpm (1000 to 9999 rpm), 10 rpm (10,000 to 99,990 rpm)
Power	115 V or 230 V AC; 50/60 Hz
Dimensions/Weight	Bezel: 3.8x1.9x2.4" (96x48x60 mm); Panel cutout: 3.6x1.8" (92x45 mm) Meter: 3.6x3.5x1.7" (92x90x42 mm)/14 oz (397 g)
Sampling Time	1 sec>60 rpm, >1 sec>10 to 60 rpm
Dimensions/ Weight	4.9x2x1.3" (124x50x33 mm)/4 oz (114 g)

**ORDERING**

461950	<b>N</b>	1/8 DIN Panel Mount Tachometer
461955		Proximity Sensor, max. 36,000 rpm
461957		Photoelectric Sensor, max. 6000 rpm