

**Phasar-Laser Tach Series** NIST CE

**Phasar-Laser** combines the accuracy and safety of a non-contact optical tachometer with the convenience and ease of operation of a pistol grip instrument, housed in a rugged steel enclosure. The tachometer provides a convenient visible red laser for easy targeting along with a latching trigger for hand held operation and a mounting bushing for tripod mounted use.

**Phasar-Laser-R** provides for an optional remote sensor for difficult to reach locations in addition to the standard internal measurement optics.

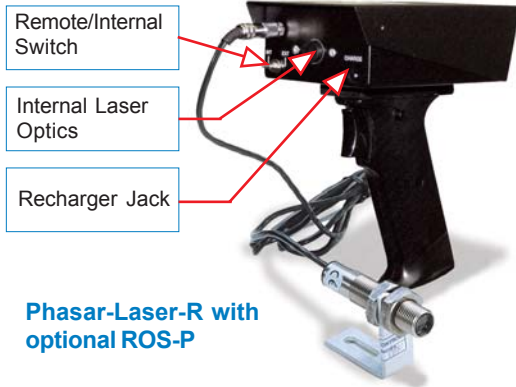
**Features**

- Convenient pistol grip design
- Rugged steel enclosure
- Safe non-contact operation to 10 feet (3 m) and 45 degrees from reflective tape
- On-target and low battery indicators
- Last measurement memory



Phasar-Laser

- Example Applications:**
- Engines
  - Dynamometers
  - Pumps
  - Fan blades
  - Centrifuges
  - Motors



Phasar-Laser-R with optional ROS-P



Specifications	Phasar-Laser and Laser-R
Range	5-100,000 RPM
Accuracy	±1 RPM or 0.01% of reading
Resolution	1 RPM
Display	6 digit, 0.5" high Liquid Crystal Display
Power On	Pistol grip trigger with latching push Switch button
Power	(4) "AA" (LR6) Alkaline batteries or *optional NiCad batteries and AC recharger

**Ordering Information**  
**Phasar-Laser** Tachometer, 12" of Tape, and Alkaline Batteries  
**Phasar-Laser Kit** Tachometer, Recharger, 5 foot roll of Tape, NiCad Batteries in Latching Case  
**Phasar-Laser-R Kit** Tachometer, Recharger, Remote Optical Sensor, 5 foot roll of Tape, NiCad Batteries in Latching Carrying Case

PORTABLE TACHOMETERS/TOTALIZERS (Non-Contact/Multi-Function)

**Tach-4A and Tach-4AR Series** NIST

**Tach-4A** innovated the combination of a high accuracy, wide range *Tachometer*, multi-function *Totalizer/Counter* and *Timer (Stopwatch)* in one versatile instrument. Tach-4A is the world's most accurate portable tachometer, providing resolution of up to 0.0001 RPM. Safe non-contact operation up to 36 inches (91.44cm) and ±45° from perpendicular on a reflective tape target.

Tach-4A is menu programmable from a six button membrane keypad. A unique scaling feature allows triggering from one or multiple pulses per revolution as a tachometer, ratemeter and totalizer/counter displaying data in engineering units.

**Tach-4AR** is available with remote sensing capability. Remote sensors may be optical, infrared, magnetic or laser. See Page 7 for optional sensors. The optional 0-5V TTL compatible Pulse Output (PO) is supplied with a cable for BNC interface to data acquisition equipment.



Tach-4A

- Example Applications:**
- Vibration TTL pulses
  - Pumps
  - Trip switches
  - Fans
  - Centrifuges
  - Calibration

Specifications	Tach-4A and Tach-4AR
Range	5-500,000 RPM
Frequency Range	0.083-8333.3 Hz
Accuracy	0.0015% of reading
Resolution	Up to 0.0001 RPM
Totalizer/Counter	1-999,999 counts
Timer (Stopwatch)	Hrs, Min, Sec, 0.01 Sec to 100 mins.
Display	6 digit alphanumeric, backlit LCD, update twice per second, self-test mode
Power	4 "AA" (LR6) Alkaline batteries or *optional NiCad batteries and AC recharger
Size (L x W x H)	6.2" x 3.74" x 1.3" (157 x 95 x 33 mm)
Weight	14 oz. (22 kg)



Tach-4AR-PO Kit with optional TTL pulse output

**Ordering Information**  
**Tach-4A** Instrument, 12" of Tape, Alkaline Batteries in Padded Case  
**Tach-4A Kit** Instrument, Recharger, 5 foot roll of Tape, NiCad Batteries in Latching Carrying Case  
**Tach-4AR Kit** or **Tach-4AR PO Kit** Instrument, Recharger, 5 foot roll of Tape, Remote Optical Sensor, NiCad Batteries in Latching Carrying Case

\*Optional NiCad batteries may be charged while in Tachometer.