Features

• Measures speed from 1 rpm to 99,999 rpm

• Accuracy of 0.02% with a resolution of 0.01 rpm

• Easily converts from non-contact to contact operation

• Non-contact sensing from up to 14" with a beam of light

• Measures user-selected units for rate and length

• 2-year warranty, NIST certification included

Description

The HH100 Combination Hand-Held Digital Tachometer combines the best features of both contact and non-contact models to accurately measure rpm, surface speed, and length.

The HH100's rugged construction, portability and outstanding features make it an ideal choice for maintenance personnel, machine operators, or others in a wide variety of machinery and material handling applications. The HH100 uses the latest microprocessor technology and is backed by an industry-leading, two-year warranty.

The HH100 can also be used to measure the accumulated total of continuously running material such as paper, wire being wound on a spool, or to check the calibration of on-line counters and totalizers.
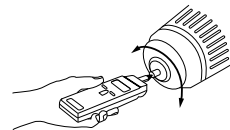
Common Applications

• Rotating motors, shafts, pulleys, gears, rollers, etc.

• Conveyor belts

• Web material

• Textiles

• Extruders

Principle of Operation

In contact operating mode, speed is sensed by directly contacting the rotating device using one of the contact adapters supplied with the HH100.
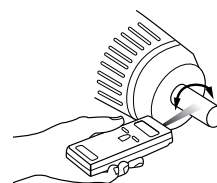
When using the non-contact mode, rotational speed is measured using a visible beam of light. The HH100 can be up to 14 inches away from the small piece of reflective tape that is affixed to the rotating element.

In other applications where surface or linear speeds are measured, the universal wheel is used for direct readout of feet/min, meters/min, or inches/min, as selected by the end user.
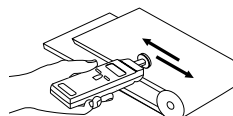
Contact rpm

Used to measure the speed of rotating motors, shafts, pulleys, gears, etc.

Non-Contact rpm

Used when contact measurement is not possible due to access, space restrictions, or safety concerns.

Linear Speed and Length

Used to measure the linear speed or length of moving surfaces.

Specifications

Measuring Ranges	
Optical Mechanical	1.00 - 99,999 (non-contact) 1.00 - 99,999 (contact)
Surface Speed (Wheel Size 6")	0.40 - 5,000 feet / minute 0.10 - 1,524 meters / minute 4.0 - 60 inches / minute
Surface Speed (Wheel Size 0.1 Meter)	0.40 - 6,550 feet / minute 0.10 - 1,999 meters / minute 4.0 - 78.70 inches / minute
Length	0 - 99,999 feet 0 - 99,999 meters 0 - 99,999 inches
Other Specifications	
Resolution	0.01 from 0 - 100 0.1 from 100 - 1,000 1 from 1,000 - 99,999
Accuracy	± 0.02% of reading or ± 1 digit
Display	5-digit LCD, 10 mm high
Decimal Point	Automatic
Memory System	Maximum, minimum, and last reading (retained in memory for the life of the batteries)
Measurement System	
Non-Contact	Visible LED light beam
Contact	Contact adapter
Engineering Units	
rpm	rpm
Surface Speed	feet / minute, inches / minute, meters / minute
Length	feet, inches, meters
Sensing Distance	Up to 24 inches
Display Update Time	0.5 seconds or one measurement period
Auto Power Off	After 30 seconds of non-use (minimum, maximum, and last reading retained in memory)
Battery Life	40 hours continuous use
Battery Type	2 AA (1.5 V) or rechargeable
Weight	6 ounces (170 grams)
Housing Material	ABS plastic

Engineering Units (continued)	
Operating Temperature	32° F to +122° F (0° C to +50° C)
Storage Temperature	-4° F to +150° F (-20° C to +70° C)
Accessories Included	• Contact adapter • Cone tip • 0.1 meter speed wheel • 6" universal surface speed wheel with integrated funnel tip adapter • 10 strips reflective tape • Operating instructions • Foam-fitted, plastic carrying case • Shaft extension, 3.15" (80 mm) • Two AA batteries
Warranty	2 years

Ordering

Model	Part Number
HH100 Hand Held Digital Tachometer	976-000900

❶ Wheel adapter

❷ Slide-in contact adapter

❸ LCD display

    • Low battery indicator

    • Memory indicators

    • On-target indicator

    • Contact mode indicator

    • Units of measure indicators

❹ Memory key selects min, max, and last reading

❺ Mode key selects desired units of measure

❻ Measure key

For more information, please refer to the installation and operating instructions manual.