

# Infrared Tachometer Model CA27



This hand-held instrument measures up to 100,000 RPM using infrared measurement. A combination digital/analog bargraph LCD displays the measurement clearly and accurately. Other features include auto or manual range selection, smoothing, min/max recording and hold functions. Count, alarm and print functions are also provided. An accessory kit of three mechanical

adapters allows for direct connection and measurement to rotating shafts and other devices. Hi and Lo alarm levels are programmable as well as display multiplier coefficient "K" scale factor.

The Model CA27 includes a carrying case with 15 reflector strips, 9V Alkaline battery and a user manual.

## Features

- Non-contact measurement through infrared beam not affected by ambient light
- Contact measurements with wheels (optional)
- Rotation measurements to 100,000rpm (and tr/min)
- Frequency measurements (Hz)
- Linear speed measurements (ft/min and m/min)
- Periodic measurements (ms)
- % Duty cycle
- Counter function (revs, turns, ft, m)
- Min/Max, Hold and Smooth functions
- Programmable alarm
- Very high accuracy (0.01%)

## Applications

- Motor rotation testing

# Specifications

<b>MODEL</b>	<b>CA27</b>
<b>RPM</b>	
Range	0 to 99,999rpm*; 0 to 99,999 tr/min*
Accuracy	1.10 <sup>-4</sup> of Reading ± 6cts
<b>FREQUENCY (Hz)</b>	
Range	0.1 to 9999.9Hz*
Accuracy	4.10 <sup>-4</sup> of Reading ± 4cts
<b>SPEED (Linear)</b>	
Range	0.6 to 59,999 m/min*; 2.0 to 99,999 ft/min*
Accuracy	m/min: 1.10 <sup>-4</sup> of Reading ± 1ct; ft/min: 3.10 <sup>-4</sup> of Reading ± 1ct Sensor: 3.10 <sup>-3</sup>
<b>PERIODIC FUNCTION (ms)</b>	
Range	9999.9 to 0.1ms*
Accuracy	1.10 <sup>-4</sup> of Reading ± 5cts
<b>% DUTY CYCLE</b>	
Range	0.2 to 125Hz: 0.1 to 99.9%*; 125 to 500Hz: 1 to 99%*
Accuracy	0.3 to 50Hz: 0.1% of Scale; 50 to 125Hz: 0.2% of Scale 125 to 500Hz: 1% of Scale
<b>EVENTS</b>	
Range	0 to 99,999 events @ 0.1Hz to 10kHz
Accuracy	±1 event
<b>GENERAL</b>	
Counter	Rev (rpm), tr (tr/min), m (m/min), ft (ft/min)
Alarms	Hi, Lo setpoint
Multiplier K	0.01 to 99,999 (measurement coefficient)
Other Functions	Min/Max, Hold, Smooth
Sensors	Infrared Optical Sensor (with reflective tape). FRB input connector* (for slow signals, ±20V max, 1Hz to 1kHz and 0.1Hz to 10kHz on extended range)
Display	Extra large 95 x 55mm LCD with bargraph
Dimensions	8.5 x 2.83 x 1.85 (216 x 72 x 47mm)
Weight	8.03 oz (250g)
Power Source	9V Alkaline battery
Optional Kit (Catalog #1749.02)	Calibrated wheel, cone and cylinder for contact measurements. Connects over optical sensor.

\*6 to 60rpm, 0.1 to 1Hz, 0.6 to 6m/min, 2 to 20ft/min, 1000 to 9999.9ms and 0.1 to 99% (0.2 to 125Hz) through input connector only.

## ORDERING INFORMATION

## CATALOG NO.

Tachometer Model CA27 (100,000-count up to 100,000rpm, Alarm, Min/Max) ..... **Cat. #1747.01**

## Contact Us

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