

# ELECTRICAL TEST TOOLS

## TACHOMETERS

### MODELS CA 1725 & CA 1727

*Simple to use and offers numerous measurement capabilities with or without contact*



CA 1725

CA 1727



## SPECIFICATIONS

| MODELS                                   | CA 1725   | CA 1727 |
|--|---|---------|
| <b>MEASUREMENTS</b>                      |   |         |
| <b>Rotational Speed Function</b>         | Range: 6 to 100,000rpm<br>Resolution: 0.0006 to 6rpm depending on range   |         |
| <b>Linear Speed Function</b>             | Range: 0.1 to 10,000m/min or ft/min<br>Resolution: 0.0006 to 6m/min depending on range  |         |
| <b>Frequency Function</b>                | Range: 0.1 to 10,000Hz<br>Resolution: 0.0004 to 0.4Hz depending on range  |         |
| <b>Period Function</b>                   | Range: 0.1 to 10,000ms<br>Resolution: 0.0003 to 0.3ms depending on range  |         |
| <b>Duty Cycle Function</b>               | Range: 10 to 10,000%<br>Resolution: 0.1 to 1% depending on range  |         |
| <b>Count Function</b>                    | Range: 0 to 99,999 events;<br>Accuracy: $\pm 1$ event (Model CA 1727)   |         |
| <b>GENERAL</b>                           |   |         |
| <b>Power Source</b>                      | 9V Alkaline battery (included)  |         |
| <b>Battery Life</b>                      | 250 x 5 min measurements with optical sensor;<br>600 x 5 min measurements with external sensor                                      |         |
| <b>Data Storage</b>                      | 4000 measurements (Model CA 1727)   |         |
| <b>Dimensions</b>                        | 8.5 x 2.83 x 1.85" (216 x 72 x 47mm)  |         |
| <b>Weight</b>                            | 8.8oz (250g)  |         |
| <b>Weatherproofing</b>                   | IP51  |         |
| <b>Environment</b>                       | Storage: -4 to +158°F (-20 to +70°C) 95% RH;<br>Operation: 32 to 131°F (0 to 55°C) 90% RH   |         |
| <b>OPTICAL SENSOR</b>                    |   |         |
| <b>Reflective Area</b>                   | 10 to 90% of the target area  |         |
| <b>Measurement Distance</b>              | 0.4 x 19.7" (1 to 50cm)<br>The maximum distance is given for a reflective adhesive strip with a minimum area of 10cm <sup>2</sup> . |         |
| <b>Measurement Angle</b>                 | $\pm 15^\circ$ in relation to the perpendicular of the reflective surface.  |         |
| <b>MECHANICAL</b>                        |   |         |
| <b>Adapter</b>                           | End-fittings: elastomer with a durometer hardness of 80   |         |
| <b>Pressure on Moving Part</b>           | Between 2 and 40N; maximum speed: 10,000rpm   |         |
| <b>Service Life</b>                      | Approx. 1000 hours at 3000rpm with a pressure of 20N  |         |
| <b>Conical End-fitting Accessory</b>     | Minimum diameter of measurement shaft: 0.2" (5mm)   |         |
| <b>Cylindrical End-fitting Accessory</b> | Speed measurements on shafts with a diameter greater than 0.2" (5mm) or flat-ended shafts   |         |
| <b>End-fitting Accessory with Wheel</b>  | Wheel diameter: 1.19" (30.183mm);<br>Wheel development: 3.94" $\pm 0.004$ " (10cm $\pm 0.1$ mm)                                     |         |

Consult factory for NIST Calibration prices

## FEATURES

- Measurements up to 100,000 RPM
- Multiple functions and automatic routines for data acquisition and storage: measurement of rotational speed, linear speed, count, frequency and period
- Extensive programming possibilities
- Digital display with analog bargraph
- USB interface for processing results on a PC (Model CA 1727)
- Includes TachoGraph software on CD-ROM (Model CA 1727) download memory only
- Stores up to 4000 measurements results (Model CA 1727)

## ACCESSORIES

### MECHANICAL ACCESSORIES KIT Catalog #1749.02

Mechanical adapter, calibrated wheel, conical and cylindrical end fitting



## PRODUCT INCLUDES

Hard case, FRB F connector, 9V battery, set of (15) reflective strips, quick start guide and a user manual.

CA 1727 also includes a USB cable and TachoGraph software.



| CATALOG NO. | DESCRIPTION              |
|-------------|--------------------------|
| 1748.10     | Tachometer Model CA 1725 |
| 1748.30     | Tachometer Model CA 1727 |