



DATA SHEET

CT 110



Tachometer

Supplied with  
CALIBRATION  
certificate\*



Easy to use



Adjustable backlight



Hold-min-max function



Manual autozero

Features

- Selection of tachometry units
- Contact/optical selection
- Hold function
- Backlight
- Configurable auto shut-off
- Display of minimum and maximum

Technical specifications

| Parameters         | Measuring units                    | Accuracy**                                                                                        | Measuring range       | Resolution |
|--------------------|------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------|------------|
| Optical tachometer | rpm                                | From 60 to 10 000 rpm:<br>±0.3% of reading ±1 rpm<br><br>From 10 001 to 60 000 rpm:<br>±30 tr/min | From 60 to 60 000 rpm | 1 rpm      |
| Contact tachometer | rpm, m/min,<br>ft/min, in/min, m/s | From 30 to 3000 rpm:<br>±1% of reading ±1 rpm                                                     | From 30 to 3000 rpm   | 1 rpm      |

\*Except class 110 S which is supplied with adjustment certificate.  
\*\*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

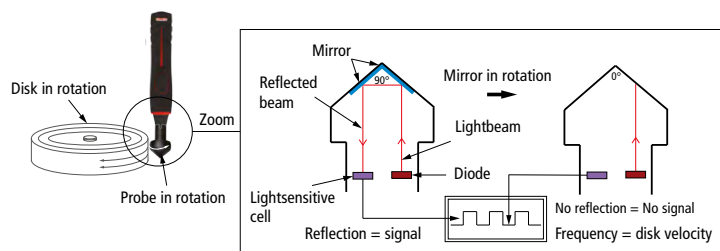
## General features

|                                |                                                                                                                                                        |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measuring elements             | Optical tachometry: optical detection (Phototransistor sighting distance max. 40 cm)<br>Contact tachometry: ETC adaptator for optical tachometry probe |
| Display                        | 4 lines, LCD technology. Dimensions: 50 x 36 mm<br>2 lines of 5 digits with 7 segments (value)<br>2 lines of 5 digits with 16 segments (unit)          |
| Connector                      | Coiled, 0.45 m length, extension: 2.4 m                                                                                                                |
| Housing                        | ABS, protection IP54                                                                                                                                   |
| Keypad                         | 5 keys                                                                                                                                                 |
| European directives            | 2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE                                                                            |
| Power supply                   | 4 batteries AAA LR03 1.5 V                                                                                                                             |
| Ambience                       | Neutral gas                                                                                                                                            |
| Conditions of use (°C, %RH, m) | From 0 to +50 °C. In non condensing conditions.<br>From 0 to 2000 m.                                                                                   |
| Storage temperature            | From -20 to +80 °C                                                                                                                                     |
| Auto shut-off                  | Adjustable from 0 to 120 min                                                                                                                           |
| Weight                         | 190 g                                                                                                                                                  |

## Operating principle

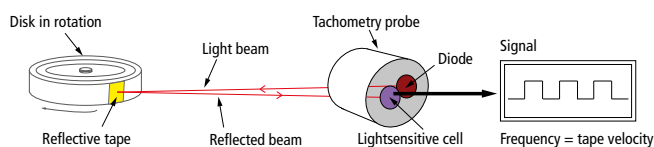
### Contact tachometry

A light beam from a diode is reflected by a rotating mirror located inside the probe head. A light sensitive cell detects the frequency of the signal of the beam which is proportional to the rotation speed.

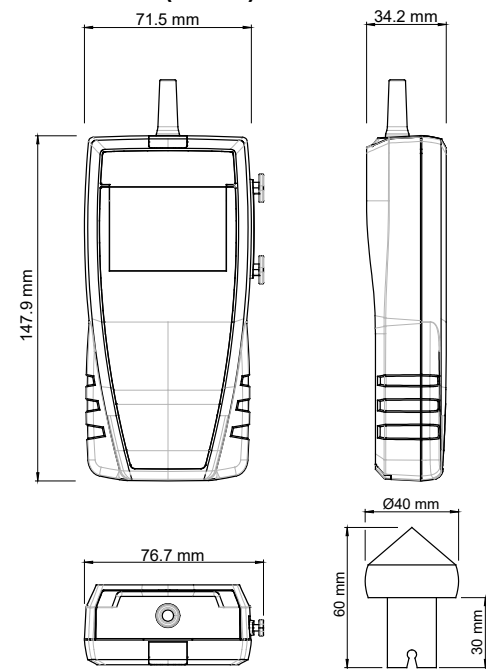


### Optical tachometry

A light beam emitted from the diode of the probe is reflected by a reflective tape placed on the measured element. A light-sensitive cell detects the beam and translates it in frequency signal which is proportional to the tape rotation speed.



## Dimensions (in mm)



## Kit content

| Designation | Sales reference | Description                                                                                                                                                    |
|-------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CT 110      | 24629           | Tachometer with optical tachometry probe Ø 17 mm, 195 mm length, tip of contact tachometry, a reflective tape, calibration certificate and soft transport case |
| CT 110 S    | 24718           | Tachometer with optical tachometry probe Ø 17 mm, 195 mm length, tip of contact tachometry, a reflective tape, adjustment certificate and soft transport case  |

## Certificates

**Calibration certificate:** A calibration is a comparison of the values of the instrument with those of a standard to determine a measurement error with an associated calibration uncertainty. A calibration certificate guarantees the traceability of measurements to national standards.

**Adjustment certificate:** An adjustment certificate is a document that ensures the conformity of the device with the tolerances of the data sheet. It ensures that the device has followed the manufacturing process.

## Accessories

| Designation | Sales reference | Description                                          |
|-------------|-----------------|------------------------------------------------------|
| CQ 15       | 24633           | Magnetic protective housing                          |
| RTE         | 24632           | Telescopic extension, 1 m length, with index at ±90° |
| MT 51       | 24636           | ABS transport case                                   |
| ST 110      | 24635           | Soft transport case                                  |

## Maintenance

We carry out calibration, adjustment and maintenance of your instruments to guarantee a constant level of quality of your measurements. As part of Quality Assurance Standards, we recommend you to carry out a yearly checking.