Alternate Terms for Tachometers
- Angular Speed Meter
- Rotation Meter

What is a tachometer?
A tachometer is a device that measures the angular speed of a rotating shaft in revolutions per minute (RPM). A good example of a device that can be measured with a tachometer is a moving fan. Also, some tachometers can measure linear surface speed in terms of feet per minute (ft/min) or meters per minute (m/min). An example of a linear surface speed measurement is a conveyor belt or escalator hand-rail.

How to select an Extech Tachometer
Use a non-contact (photo) tachometer for applications where it is not feasible to have the tachometer come in contact with the rotating device. This is the case in high speed applications and where the object to be measured cannot be easily reached.

Use a contact tachometer for applications where direct contact of the tachometer with the object is preferred. You can also purchase a combination (contact/non-contact) tachometer for the maximum in flexibility.

How do Non-contact Tachometers Operate?
Non-contact tachometers use light (photo) reflections to measure RPM. First, a small piece of reflective tape (approx. 1/4") is mounted on the object to be measured. Second, the light source is directed toward the tape. The reflection from the tape allows the meter to measure and display an accurate RPM reading.

How do Contact Tachometers Operate?
To measure RPM with a contact tachometer, the tip of the tachometer’s sensor is placed in direct contact with the rotating object. After a short time an accurate reading is displayed. Linear surface speed can be measured in a similar way; a wheel attachment is connected to the sensor tip and touched to the moving belt. Three attachment accessories are provided: Disc, Conical, and Wheel.

What is the significance of an IR Thermometer?
In addition to saving time and cutting cost, the built-in IR thermometer permits the user to check for hot spots or to check surface temperature. The IR thermometer permits non-contact temperature measurements for areas difficult to reach or unsafe to touch.

Tachometer Applications
- Rotational motor speed
- Moving fans, pumps, gears, and machinery
- Production and automotive use
- Propeller devices

Accessory wheels enable tachometer to measure linear surface speeds

Non-contact model for use on machinery where high speed measurements are required