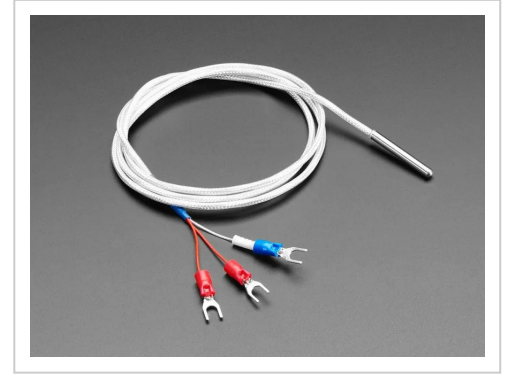


# Platinum RTD Sensor - PT1000 - 3 Wire 1 metre long

- Based on the principle of resistance measurement- The resistance material is platinum with a value of 1000 Ohm at a temperature of 0°C- Platinum has a positive resistance temperature factor; the resistance decreases with increasing temperature

**Product number** ADA3984

**Weight** 0.02kg



## Product description

For precise temperature measurements, there is nothing better than a platinum RTD. Resistance temperature detectors (RTDs) are temperature sensors that contain a resistor that changes its resistance value when the temperature changes, i.e. a type of thermistor. In this sensor, the resistor is a small platinum strip with a resistance of 1000 ohms at 0°C, hence the name PT1000. Compared to most NTC/PTC thermistors, the PT resistor is much more stable and precise (but also more expensive). PT1000 sensors are used for temperature measurement in laboratories and in industry and have gained a good reputation for their accuracy (better than thermocouples), repeatability and stability.

This high-temperature PT100 sensor is equipped with a stainless steel shield and is suitable for temperatures from - 50°C to 280°C.

### PT1000 features:

- Based on the principle of resistance measurement
- The resistance material is platinum with a value of 1000 Ohm at a temperature of 0°C
- Platinum has a positive resistance temperature factor; resistance increases with increasing temperature
- The change in resistance is a function of temperature: 3.85Ω/°C nominal
- High accuracy and stability compared to thermocouples, silicon-based temperature sensors or thermistors

Each sensor is supplied with three wires. Two of the wires are connected to the two sides of the platinum resistor as you would expect. The third wire is also connected to one end of the PT1000. If your RTD amplifier supports 3-wire sensors, it will drive the resistor with the first two wires and measure the voltage differences so it can subtract the voltage drop across the wires. If your RTD amplifier only supports 2-wire sensors, you can simply disconnect the third wire.

Use the Adafruit RTD Sensor Breakout to connect this fine sensor to your favourite microcontroller.

### Technical details

- 316L stainless steel capsule: 4mm diameter and ~30mm long (the size of the stainless steel capsule may vary!)
- The cable is approx. 1m / 100cm long
- Diameter: 2.8mm
- 26 AWG 7/0.15mm stranded
- Contains a PT1000 temperature sensor
- Three wires with terminal lugs

## Product properties

**Zolltarifnummer** 84715000

**Gross Weight (kg)** 0.02

**Country of Origin** China

**Brand** Adafruit

**Product ID** ADA3984

**Manufacturer ID** 3984

## More images

