



18B20 Digital Temperature Sensor - 5m cable

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18B20 SENSOR





Description

18B20 Digital Temperature Sensor - 5m cable

This is a waterproofed version of the DS18S20 Temperature sensor. Handy for when you need to measure something far away, or in wet conditions. While the sensor is good up to 125°C the cable is jacketed in PVC so we suggest keeping it under 100°C. Because they are digital, you don't get any signal degradation even over long distances! The DS18S20 provides 9 to 12-bit (configurable) temperature readings over a 1-Wire interface, so that only one wire (and ground) needs to be connected from a central microprocessor. Usable with 3.0-5.5V systems. Because each DS18S20 contains a unique silicon serial number, multiple DS18S20s can

exist on the same 1-Wire bus. This allows for placing temperature sensors in many different places. Applications where this feature is useful include HVAC environmental controls, sensing temperatures inside buildings, equipment or machinery, and process monitoring and control. With our pluggable terminal, there is no soldering required to connect to our IO Expansion Shield.

Quick Spec

- Usable with 3.0V to 5.5V power/data
- ±0.5°C Accuracy from -10°C to +85°C
- Usable temperature range: -55 to 125°C
- 9 to 12 bit selectable resolution
- Uses 1-Wire interface- requires only one digital pin for communication
- Unique 64 bit ID burned into chip
- Multiple sensors can share one pin
- Temperature-limit alarm system
- Query time is less than 750ms
- 3 wires interface:
- Red wire VCC
- Black wire GND
- Yellow wire DATA
- Stainless steel tube 6mm diameter by 35mm long
- Cable diameter: 4mm
- Length: 5M

Python Code

```
#The 18B20 sensor is a digital temperature sensor that communicates over a 1-Wire interface.
    Here's an example code in Python that #reads the temperature from an 18B20 sensor connected to a
     Raspberry Pi:
     #Note: This code assumes that the 18B20 sensor is connected to GPIO4 (pin 7) of the Raspberry Pi.
 2.
     If you're using a different pin, #you'll need to modify the device_folder variable accordingly.
3.
4.
     import os
 5.
     import glob
6.
     import time
7.
8.
     # initialize the 1-Wire bus
9.
     os.system('modprobe w1-gpio')
    os.system('modprobe w1-therm')
10.
11.
     # find the file name of the 18B20 sensor
12.
    base_dir = '/sys/bus/w1/devices/'
13.
     device folder = glob.glob(base dir + '28*')[0]
14.
     device_file = device_folder + '/w1_slave'
15.
16.
     def read_temp_raw():
17.
18.
         """Read the raw temperature data from the 18B20 sensor"""
         f = open(device_file, 'r')
19.
20.
         lines = f.readlines()
21.
         f.close()
```

Arduino Code

```
//Here's an example code in Arduino that reads the temperature from an 18B20 sensor connected to
     an Arduino board:
    //Note: This code assumes that the 18B20 sensor is connected to pin 2 of the Arduino board. If
    you're using a different pin, you'll //need to modify the ONE_WIRE_BUS definition accordingly.
3.
4.
    #include <OneWire.h>
5.
    // Data wire is connected to pin 2
6.
    #define ONE_WIRE_BUS 2
7.
8.
9.
    OneWire oneWire(ONE_WIRE_BUS);
10.
11.
    void setup() {
12.
       Serial.begin(9600);
     }
13.
14.
15.
    void loop() {
16.
       byte i;
       byte present = 0;
17.
       byte type s;
18.
19.
       byte data[12];
20.
       byte addr[8];
21.
```

Shipping List

• 1 x 18B20 Digital Temperature Sensor - 5m cable



18B20 Digital Temperature Sensor - 5m cable

Brand: Generic

Product Code: 18B20-5M

• Weight: 0.105kg

Product Status : Active

Stock

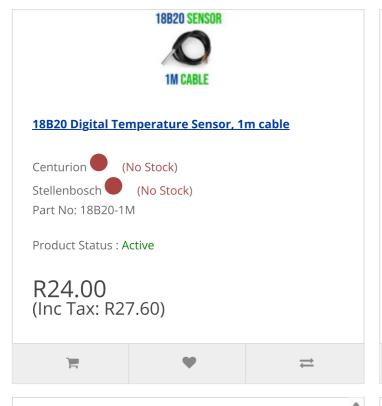
Warehouse Stock Status Location Centurion In Stock UC118 Stellenbosch In Stock 887 + 903

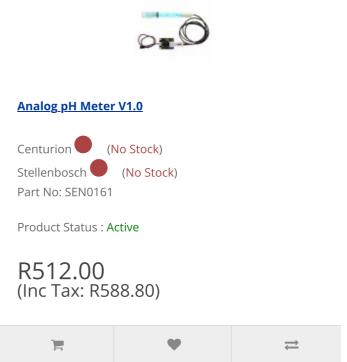
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Centurion (No Stock) Stellenbosch (No Stock)

Part No: SHT10-1M

Product Status: Active

R469.00 (Inc Tax: R539.35)



18B20 Temperature Module

Centurion (No Stock) Stellenbosch (No Stock)

Part No: 18B20-MOD

Product Status: Active

R23.00

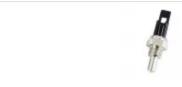
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Thermostat 12V Controller

Centurion (No Stock)





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Centurion (No Stock) Stellenbosch (No Stock) Part No: 10K-NTC-BOILER

Product Status: Active

R52.00

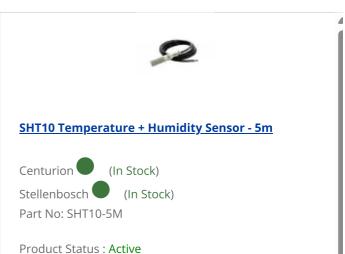
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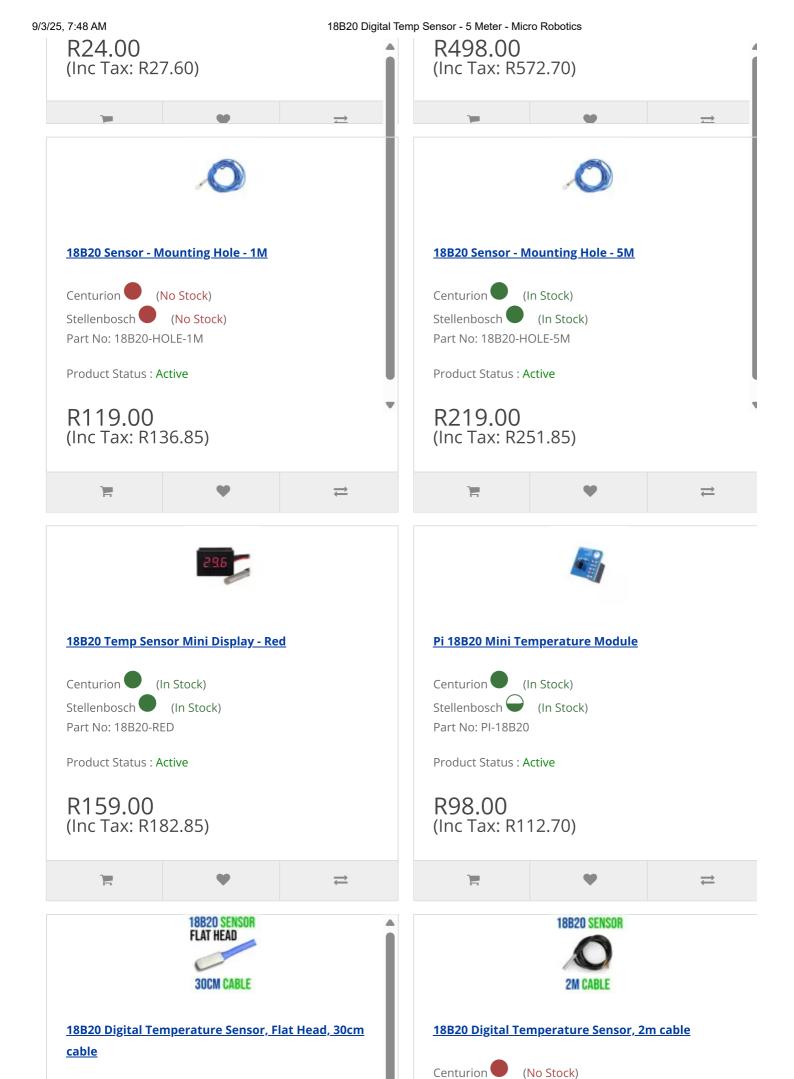


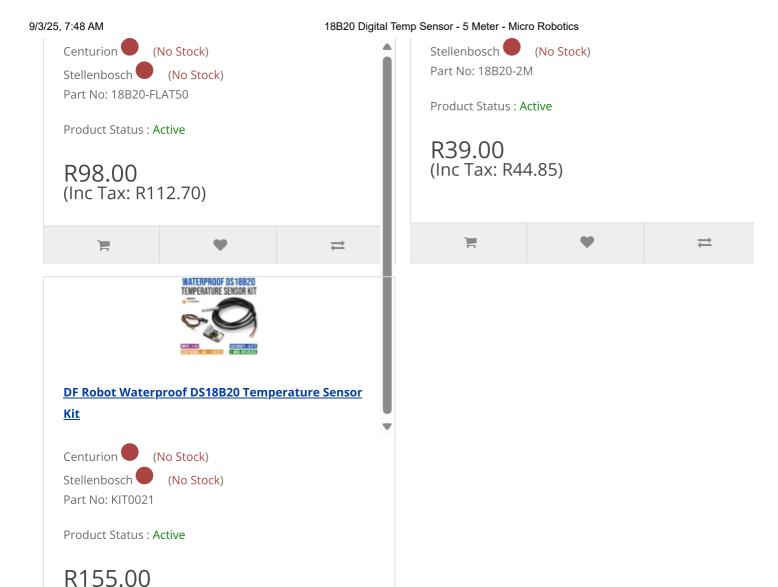
18B20 TO-92 Temperature Sensor Chip

Centurion (In Stock) Stellenbosch (In Stock) Part No: 18B20-TO-92

Product Status: Active







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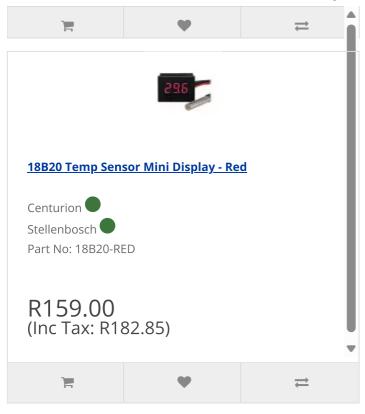
Tags: temp, digital, ds18b20, sensor, meter, temperature, 18b20

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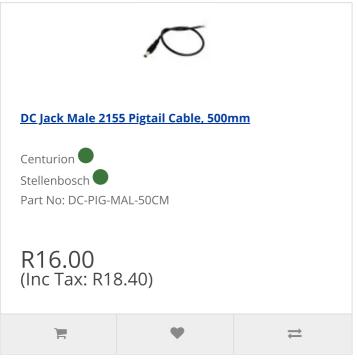
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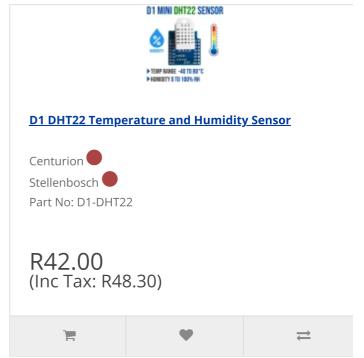


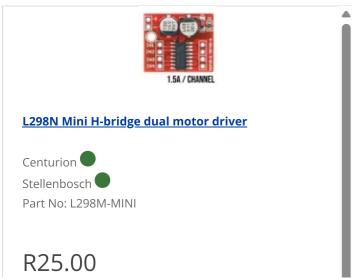


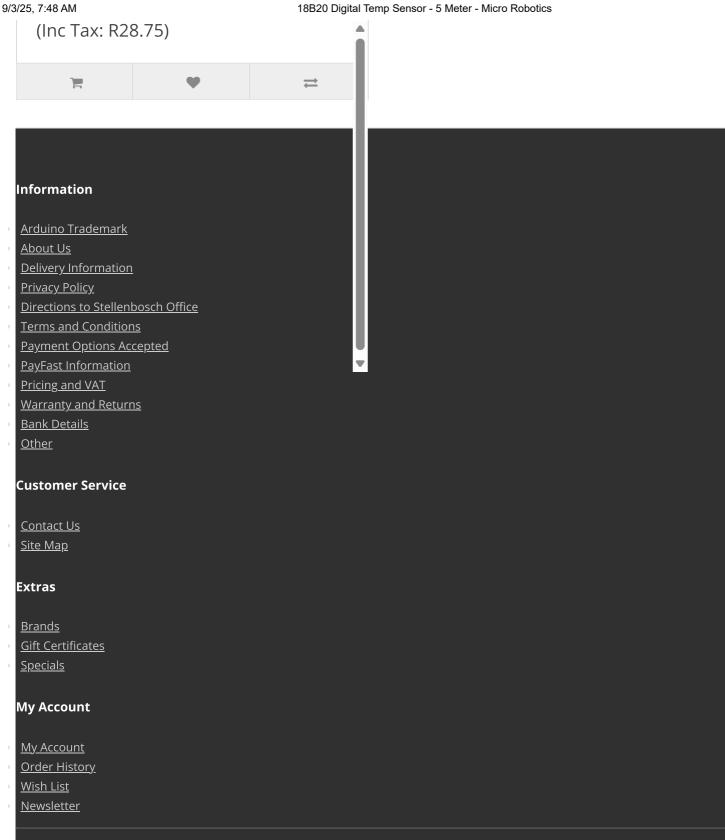












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