AtlasScientific Environmental Robotics

V 1.2 Revised 10/24

EZO Complete-TMPTM USB Temperature meter





Reads	Temperature	Temp reading time	1 reading /sec
Range	-126.000 °C to 1254 °C	Supported probes	Any type & brand PT-100 or PT-1000
Accuracy	+/- (0.1 + 0.0017 x °C)	Calibration	Single point



PATENT PROTECTED

Interference free

The EZO complete readings are unaffected by other sensors in the same water.



Ingress protection – IP62

The EZO Complete-TMP[™] is dust proof and resistant to splashing water. Two areas of concern are the USB connector and the probe connector.



USB connector



Ingress protection – IP62

An electrical short can occur if water enters the USB connector. A USB short could permanently damage the EZO-Complete. A USB short is not covered under warranty.



A connector short can occur if water enters the SMA connector. A connector short will cause the temperature readings to pin to -1023, or the probe will respond slowly to changes in temperature. A connector short is reversible and will not damage the EZO-Complete. However, frequent shorts will eventually damage the temperature probe.



The SMA connector is part of your probe; Nothing should be in contact with this part.

3



Setup



Click here to download





Setup

Once you have installed the AtlasDesktop monitoring software, you can begin monitoring and logging your readings.



Best practices for calibration

Always watch the readings throughout the calibration process. Issue calibration commands once the readings have stabilized.



▲ Never do a blind calibration! ▲

Issuing a calibration command before the readings stabilize will result in drifting readings.





Calibration procedure

Temperature	Atlas Scientific
26.2	Environmental Robotics
26	
25.6	
25.4 25.2	
25 24.8	
24.6	
24.2	
24 23.8	
23.6 23.4	
23.2	
	25.99° C
A D	
Wi	thin the AtlasDesktop monitoring software, click on the "gear" icon.





Advanced setup

The EZO-Complete-TMP readings can be linked to other EZO-Complete sensors to provide temperature compensation to the other sensors readings.

Example

We setup an EZO-complete monitoring system to read conductivity and temperature.



Entering the conductivity setup page, you can link the readings from your EZO-Complete temperature sensor to your conductivity readings, this will give you temperature compensated conductivity readings.

EC		Atlas Scientific
Version:	2.16	
Device Name:	control	
Voltage:	3.81	
Address:	128	
LED:	Off • On •	
Temp Compensation Address:	129 ~ 129	
Save		

The connected EZO-complete-TMP is the device with address 129. If multiple temperature sensors are connected, multiple address will be listed. (The temperature sensor address is listed in the temp sensor setup page)

