Warranty

Vernier warrants this product to be free from defects in materials and workmanship for a period of five years from the date of shipment to the customer. This warranty does not cover damage to the product caused by abuse or improper use. This warranty covers educational institutions only.



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Vernier EasyLink® (Order Code EZ-LINK)



Vernier EasyLink is a single channel interface that plugs into the USB port of any TI-Nspire™ handheld or TI-84 Plus graphing calculator. Its flexibility and ease of use make it perfect for a variety of activities in science and math. EasyLink supports over 60 analog sensors, including Gas Pressure, pH, and Dual-Range Force.

Using the Vernier EasyLink with TI-84 Plus (any model)

Follow this general procedure when using Vernier EasyLink with the TI-84 Plus family of calculators.

- 1. Confirm that the Vernier EasyData[®] application is installed on the calculator. Do that by pressing the APPS button and scrolling through the alphabetical list of applications. When you know that EasyData is there, press 2nd [OUIT] to return to the home screen. If EasyData is not installed, see below.
- 2. Connect one of the compatible sensors (listed in the chart) to Vernier EasyLink.
- 3. Connect Vernier EasyLink to the USB port on the calculator. The calculator will automatically launch EasyData and detect the sensor.
- 4. You are now ready to collect data.

For more information about EasyData, visit our website at www.vernier.com/easydata

Obtaining EasyData

If EasyData is not installed on your TI-84 Plus graphing calculator, you will need to install it. EasyData can be downloaded free from our website (www.vernier.com/easydata). Download the application to your computer and then use a USB computer cable and TI ConnectTM or TI Connect CE software to send the application from the computer to the calculator.

Using Vernier EasyLink with TI-Nspire and TI-Nspire CAS Handhelds (any model)

- 1. Confirm that you are running TI-Nspire software version 3.0 or newer.
- 2. Connect one of the compatible sensors (listed in the chart) to Vernier EasyLink.
- 3. Turn on the handheld and connect Vernier EasyLink to the USB port on the handheld. The handheld will launch the DataQuest[™] application automatically.

The DataQuest app is part of the TI-Nspire operating system version 3.0 or newer. See your TI-Nspire documentation for additional information on collecting sensor data using TI-Nspire.

Compatible Analog Sensors

Sensor	Order Code	Sensor	Order Code
30-Volt Voltage Probe	30V-BTA	Instrumentation Amplifier	INA-BTA
25-g Accelerometer	ACC-BTA	Low-g Accelerometer	LGA-BTA
Anemometer	ANM-BTA	Light Sensor	LS-BTA
Ammonium Ion-Selective Electrode	NH4-BTA	Magnetic Field Sensor	MG-BTA
Barometer	BAR-BTA	Melt Station	MELT-BTA
Blood Pressure Sensor*	BP-BTA	Nitrate Ion-Selective Electrode	NO3-BTA
Calcium Ion-Selective Electrode	CA-BTA	O ₂ Gas Sensor	O2-BTA
Charge Sensor	CRG-BTA	ORP Sensor	ORP-BTA
Chloride Ion-Selective Electrode	CL-BTA	PAR Sensor	PAR-BTA
CO₂ Gas Sensor [◊]	CO2-BTA	pH Sensor	PH-BTA
Colorimeter [♦]	COL-BTA	Potassium Ion-Selective Electrode	K-BTA
Conductivity Probe	CON-BTA	Pyranometer	PYR-BTA
Constant Current System	CCS-BTA	Relative Humidity Sensor	RH-BTA
Current Probe	DCP-BTA	Respiration Monitor Belt (requires GPS-BTA)	RMB
Dual-Range Force Sensor	DFS-BTA	Salinity Sensor	SAL-BTA
Differential Voltage Probe	DVP-BTA	Soil Moisture Sensor	SMS-BTA
EKG Sensor [♦]	EKG-BTA	Sound Level Sensor	SLS-BTA
Electrode Amplifier	EA-BTA	Spirometer	SPR-BTA
Exercise Heart Rate Monitor	EHR-BTA	Stainless Steel Temperature Sensor	TMP-BTA
Extra Long Temperature Probe	TPL-BTA	Surface Temperature Probe	STS-BTA
Flow Rate Sensor	FLO-BTA	Thermocouple	TCA-BTA
Force Plate	FP-BTA	Tris-Compatible Flat pH Sensor	FPH-BTA
Gas Pressure Sensor	GPS-BTA	Turbidity Sensor	TRB-BTA
Goniometer	GNM-BTA	UVA Sensor	UVA-BTA
Hand Dynamometer	HD-BTA	UVB Sensor	UVB-BTA
Hand-Grip Heart Rate Monitor	HGH-BTA	Voltage Probe	VP-BTA
High Current Sensor	HCS-BTA	Wide-Range Temperature Probe	WRT-BTA

* This sensor is not supported in EasyData.

 $^{\lozenge}$ This sensor can quickly drain the calculator batteries.

For the most up-to-date list of compatible sensors, go to www.vernier.com/ez-link Go to www.vernier.com/sensors for more information on any of these sensors.

This interface is equipped with circuitry that supports auto-ID. When used with the TI-84 Plus or TI-Nspire calculators or TI-SmartViewTM CE, TI-Nspire, Logger Pro^{\otimes} , or Vernier Graphical Analysis[®] software on a computer , the data-collection software identifies the interface and sensor and uses pre-defined parameters to configure an experiment appropriate for the sensor. This simplifies the experimental set up.

Power Considerations

Vernier EasyLink draws its power and the power for the sensor from the calculator battery. Both of these power draws will affect the time between charges for rechargeable batteries or battery lifetime for AAA batteries. Of course, your specific results will be determined by the amount of use and the type of sensor.

Specifications

- 12-bit resolution
- Maximum sample rate: 200 samples per second

Note: Vernier products are designed for educational use. Our products are not designed nor recommended for any industrial, medical, or commercial process such as life support, patient diagnosis, control of a manufacturing process, or industrial testing of any kind.

Troubleshooting Tips

LED remains red

When the software communicates with Vernier EasyLink, the LED on the Vernier EasyLink shows the status of the communications. Initially as they communicate, the LED is red, and then it turns to green when the communications have been established. If the status remains red, contact Vernier for additional help.

Vernier EasyLink not identified/LED remains off

If the LED is off while the data-collection software is running and your Vernier EasyLink is attached but not identified, select New from the File menu in the software. If this fails to resolve the problem, recharging the battery or inserting a fresh set of AAA batteries will probably solve the problem. If the problem persists, contact Vernier for additional support.

EasyData does not auto-launch

For TI-84 Plus, verify the Easy Data app is installed. For TI-Nspire, verify the operating system is 3.0 or newer. If so, check to be sure the calculator's batteries are fresh or fully charged. If the data collection app does not auto-launch, leave Vernier EasyLink attached to the calculator and start the app manually.

With the appropriate adapter (order code MINI-USB), Vernier EasyLink can also connect to the USB port of a computer or LabQuest.