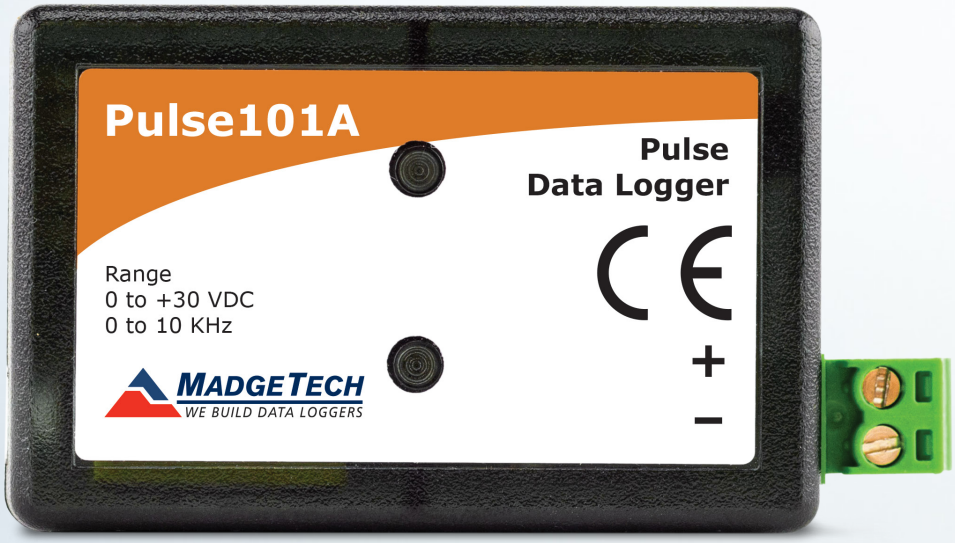
Pulse101A

Pulse Data Logger



Product User Guide

To view the full MadgeTech product line, visit our website at **madgetech.com**.

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WE BUILD DATA LOGGERS

Product Overview

The **Pulse101A** records the number of pulse inputs or contact closures on the input of the device. The input is continuously sampled at 10 kHz, therefore, the input pulse must be at least 10 microseconds in duration. The counter is reset at the beginning, and the count is recorded at the end of each sample interval.

***Note**: An input voltage of greater than 30 volts DC on the input could cause loss of data or damage to data logger*

Installation Guide

Installing Interface Cable

IFC200 (sold separately) — Insert the device into a USB port. The drivers will install automatically.

Installing the Software

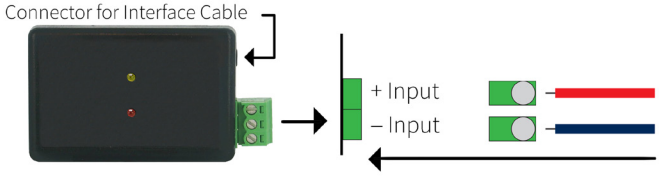
The Software can be downloaded from the MadgeTech website at **madgetech.com**. Follow the instructions provided in the Installation Wizard.

Wiring The Data Logger

Wiring Options

Three position removable screw terminal connections, accepts 2-wire configurations.

***Warning**: Note the polarity instructions. Do not attach wires to the wrong terminals.*



Device Operation

Connecting and Starting the Data Logger

1. Once the software is installed and running, plug the interface cable into the data logger.
2. Connect the USB end of the interface cable into an open USB port on the computer.
3. The device will appear in the Connected Devices list. Highlight the desired data logger.
4. For most applications, select **Custom Start** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **Start**.
    - **Quick Start** applies the most recent custom start options,
    - **Batch Start** is used for managing multiple loggers at once,
    - **Real Time Start** stores the dataset as it records while connected to the logger.)
5. The status of the device will change to **Running, Waiting to Start or Waiting to Manual Start**, depending upon your start method.
6. Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Download Data from a Data Logger

1. Connect the logger to the interface cable.
2. Highlight the data logger in the Connected Devices list. Click **Stop** on the menu bar.
3. Once the data logger is stopped, with the logger highlighted, click **Download**.
4. Downloading will offload and save all the recorded data to the PC.

Engineering Units

Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring voltage outputs from different types of sensors such as wind speed and flow rate. Please refer to the Engineering Units Video on **madgetech.com/resources/videos** for step-by-step setup instructions.

Set Password

To password protect the device so that others cannot start, stop or reset the device;

1. In the **Connected Devices** panel, click the device desired.
2. On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
3. On the **General** Tab, click **Set Password**.
4. Enter and confirm the password in the box that appears, then select **OK**.

LED Indicators

Green LED Blinks:
10 seconds to indicate logging and 15 seconds to indicate Delay or Manual Start Mode - Standby (waiting to start)

Red LED Blinks:
10 seconds to indicate low battery and/or full memory

Multiple Start/Stop Mode Activation

- **To start device:** Press and hold the push button for 5 seconds, the green LED will flash during this time. The device has started logging.
- **To stop the device:** Press and hold the push button for 5 seconds, the red LED will flash during this time. The device has stopped logging.

Device Maintenance

Battery Replacement

Materials: Small Phillips Head Screwdriver and a Replacement Battery (LTC-7PN)

1. Puncture the center of the back label with the screw driver and unscrew the enclosure.
2. Remove the battery by pulling it perpendicular to the circuit board.
3. Insert the new battery into the terminals and verify it is secure.
4. Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Recalibration

The Pulse101A has a digital input signal and cannot be calibrated. A certificate of conformance can be provided.

Need Help?

Product Support & Troubleshooting:

- Visit our Resources online at **madgetech.com/resources**.
- Contact our friendly Customer Support Team at **(603) 456-2011 or support@madgetech.com**.

MadgeTech 4 Software Support:

- Refer to the built-in help section of the MadgeTech 4 Software.
- Download the MadgeTech 4 Software Manual at **madgetech.com**.
- Contact our friendly Customer Support Team at **(603) 456-2011 or support@madgetech.com**.