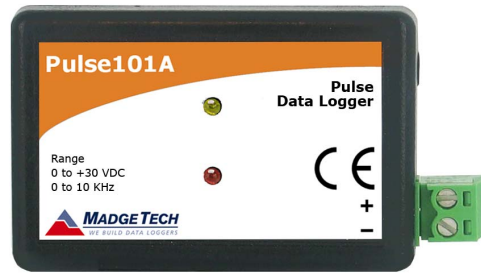


# PULSE101A

## PULSE DATA LOGGER



The Pulse101A is one of MadgeTech's newest data loggers. It is part of a new series of low cost, state-of-the-art data logging devices. MadgeTech has taken the lead in offering the most advanced, low cost, battery powered data loggers in the world today.

### Features

- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 500,000 Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- N.I.S.T. Traceable
- Field Upgradeable

### Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

### Applications

- Compatible with Dry Contact Closures
- Flow Rate Recording
- Gas and Water Metering
- Traffic Studies
- Frequency Recording
- Air Speed Indicators
- General Purpose Pulse Recording

The Pulse101A offers a 10 year battery life, 1 second reading rate, a multiple start/stop function, ultra-high speed download capability, 500,000 reading storage capacity, optional memory wrap, battery life indicator, optional password protection and more. The Pulse101A is priced at \$99 each and can be delivered from stock now. Our research has shown that the Pulse101A is second to no other data logger when it comes to price and performance.

Using the MadgeTech Software, starting, stopping and downloading from the Pulse101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in multiple units, using the Engineering Units function. The data can also be automatically exported to Excel® for further calculations.

As the leader in low power data logger technology, MadgeTech continuously improves its products and develops solutions to meet ever-changing challenges. The Pulse101A was designed with our customers in mind. MadgeTech offers free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

## MADGETECH DATA LOGGER SOFTWARE

**Key**

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel®

The screenshot displays the MadgeTech software interface. The main window shows a graph of pulses over time. A table view is also visible, showing columns for 'Rdg #', 'Date & Time (EDT)', 'Pulses', and 'Units'. A 'Statistics' window is open, showing 'General Statistics' for the device. A 'Digital Calibration' window is also open, showing device parameters and calibration options. A 'Copy to Excel' button is highlighted in the graph area.

Rdg #	Date & Time (EDT)	Pulses	Units
1	Oct 15, 2010 01:13:37 PM	20	Pulses
2	Oct 15, 2010 01:14:37 PM	20	Pulses
3	Oct 15, 2010 01:15:37 PM	20	Pulses
4	Oct 15, 2010 01:16:37 PM	20	Pulses
5	Oct 15, 2010 01:17:37 PM	20	Pulses
6	Oct 15, 2010 01:18:37 PM	20	Pulses
7	Oct 15, 2010 01:19:37 PM	20	Pulses
8	Oct 15, 2010 01:20:37 PM	20	Pulses
9	Oct 15, 2010 01:21:37 PM	20	Pulses
10	Oct 15, 2010 01:22:37 PM	20	Pulses

- Software Features:**
- Multiple graph overlay
  - Statistics
  - Digital calibration
  - Zoom in/ zoom out
  - Full time zone support
  - Data annotation
  - Min./Max./Average lines
  - Data table view
  - Automatic report generation
  - Summary view
  - Multilingual

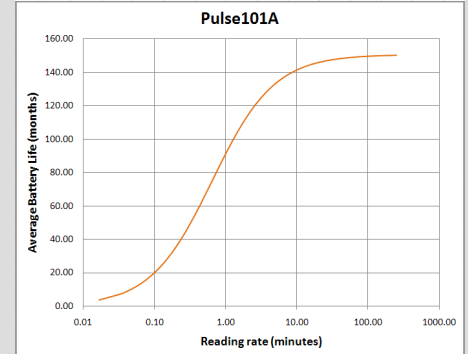
# PULSE101A SPECIFICATIONS\*

<b>Input Connection:</b>	Removable screw terminal
<b>Maximum Pulse Rate:</b>	10KHz
<b>Input Range:</b>	0 to 30VDC continuous
<b>Input Low:</b>	< 0.4 V
<b>Input High:</b>	> 2.8 V
<b>Internal Weak Pull-Up:</b>	<60μA
<b>Input Impedance:</b>	>60kΩ
<b>Minimum Pulse Width/</b>	≥ 10 microseconds
<b>Contact Closure Duration:</b>	
<b>Reading Rate:</b>	1 reading every second to 1 every 12 hours
<b>Memory:</b>	500,000 readings; software configurable memory wrap 250,000 readings in multiple start/stop mode
<b>Wrap Around:</b>	Yes
<b>Start Modes:</b>	<ul style="list-style-type: none"> <li>• Immediate start</li> <li>• Delay start up to 18 months</li> <li>• Multiple pushbutton start/stop</li> </ul>
<b>Multiple Start/Stop Mode:</b>	Start and stop the device multiple times without having to download data or communicate with a PC
<b>Multiple Start/Stop Mode</b>	To start the device: <b>Activation:</b> <i>Press and hold the pushbutton for 5 seconds. The device has started logging.</i>
	To stop the device: <i>Press and hold the pushbutton for 5 seconds while the device is logging. The device has stopped logging.</i>
<b>Real Time Recording:</b>	The device may be used with PC to monitor and record data in real-time
<b>LED Functionality:</b>	Green LED blinks: <i>10 second rate to indicate logging</i> <i>15 second rate to indicate delay start mode</i>
	Red LED blinks: <i>10 second rate to indicate low battery and/or full memory</i> <i>1 second rate to indicate an alarm condition</i>
<b>Password Protection:</b>	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.

**Engineering Units:** Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring outputs from different types of sensors such as flow rate, wind speed and more

**Battery Type:** 3.6V lithium battery included; **user replaceable**

**Battery Life:** 10 years typical, dependent upon frequency and duty cycle



Graph display of the device recording in a 25° C environment.

**Time Accuracy:** ±1 minute/month (at 20°C/68°F, stand alone data logging)

**Computer Interface:** USB (interface cable required); 115,200 baud

**Software:** XP SP3/Vista/Windows 7

**Operating Environment:** -40°C to +80°C (-40°F to +176°F), 0%RH to 95%RH non-condensing

**Dimensions:** 1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)

**Weight:** 0.9 oz (24 g)

**Materials:** ABS Plastic

**Approvals:** CE

**BATTERY WARNING:** WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

## ORDERING INFORMATION

MODEL	DESCRIPTION	PRICE (U.S.)
PULSE101A	Pulse Data Logger	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
LTC-7PN	Replacement battery for Pulse101A	\$10.00

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)

ASK ABOUT  
OUR OTHER  
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LOGGERS

Temperature  
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Voltage  
Wireless  
Intrinsically Safe  
Spectral Vibration  
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