

# PULSE101A

## PULSE DATA LOGGER



### Features

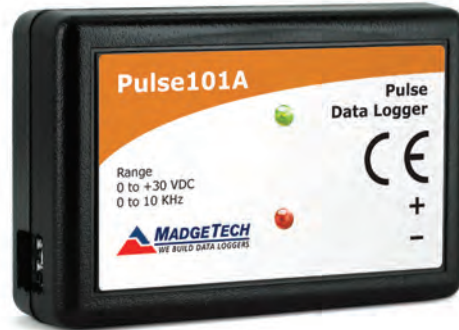
- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 500,000 Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Field Upgradeable

### 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 is a compact data logger compatible with many switches, meters and transducers. This multipurpose pulse recording device is designed to accurately monitor and record events occurring within a specified time frame.

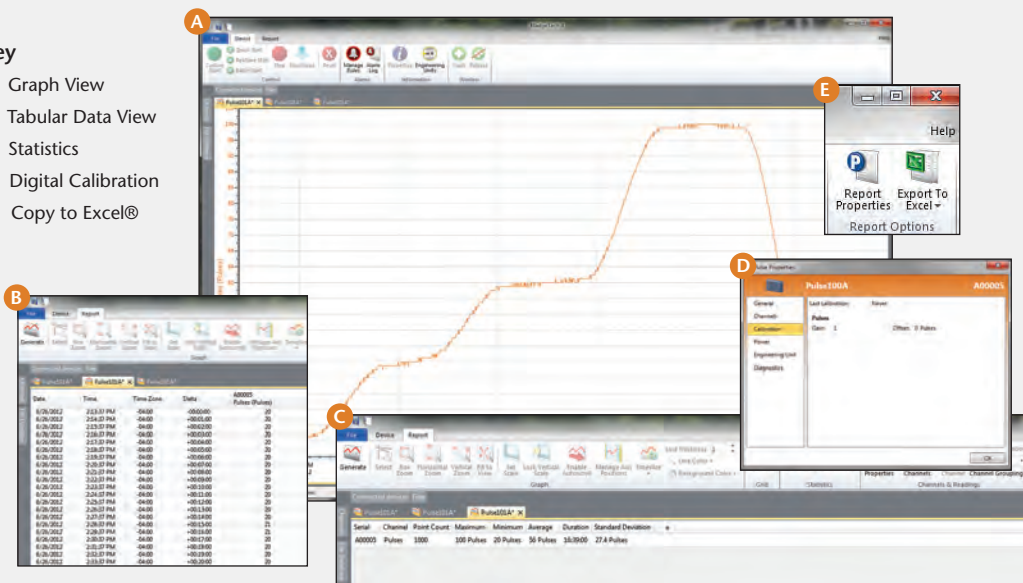
The Pulse101A can be used for flow rate, gas and water metering, or can also be used in conjunction with an anemometer to track air speed. This versatile low cost device is compatible with dry contact closures and has many general purpose uses such as frequency monitoring and traffic studies.

The Pulse101A has a maximum pulse rate of 10KHz to capture rapid events for a wide range of applications. With a ten year battery life and the ability to store up to 500,000 readings, the Pulse101A can be deployed for long term assignments and configured to start and stop logging as specified by the user.

## MADGETECH DATA LOGGER SOFTWARE

### Key

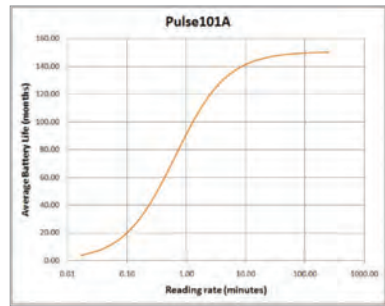
- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®



- ### Software Features:
- Multiple graph overlay
  - Statistics
  - Digital calibration
  - Zoom in/ zoom out
  - Lethality equations (F0, PU)
  - Mean Kinetic Temperature
  - 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>	10 KHz
<b>Input Range:</b>	0 to 30 VDC continuous
<b>Input Low:</b>	< 0.4 V
<b>Input High:</b>	> 2.8 V
<b>Internal Weak Pull-Up:</b>	<60 $\mu$ A
<b>Input Impedance:</b>	>60 k $\Omega$
<b>Minimum Pulse Width/ Contact Closure Duration:</b>	$\geq$ 10 microseconds
<b>Reading Rate:</b>	1 reading every second up to 1 reading every 24 hours
<b>Memory:</b>	<ul style="list-style-type: none"> <li>500,000 readings; software configurable memory wrap</li> <li>250,000 readings in multiple start/stop mode</li> </ul>
<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>Stop Modes:</b>	<ul style="list-style-type: none"> <li>Manual through software</li> <li>Timed (specific date and time)</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 Activation:</b>	<p>To start the device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.</p> <p>To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.</p>
<b>Real Time Recording:</b>	The device may be used with PC to monitor and record data in real time
<b>LED Functionality:</b>	<p>Green LED blinks: 10 second rate to indicate logging 15 second rate to indicate delay start mode</p> <p>Red LED blinks: 10 second rate to indicate low battery and/or full memory</p>

<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.
<b>Engineering Units:</b>	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
<b>Battery Type:</b>	3.6V lithium battery included; <b>user replaceable</b>
<b>Battery Life:</b>	<p>10 years typical, dependent upon frequency and duty cycle</p>  <p>Graph display of the device recording in a 25 °C environment.</p>
<b>Time Accuracy:</b>	$\pm$ 1 minute/month (at 20 °C/68 °F, stand alone data logging)
<b>Computer Interface:</b>	USB (interface cable required); 115,200 baud
<b>Software:</b>	XP SP3/Vista/Windows 7/Windows 8
<b>Operating Environment:</b>	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
<b>Dimensions:</b>	1.4 in x 2.5 in x 0.6 in (36 mm x 64 mm x 16 mm)
<b>Weight:</b>	0.9 oz (24 g)
<b>Materials:</b>	ABS Plastic
<b>Approvals:</b>	CE

**BATTERY 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).

## ORDERING INFORMATION

MODEL	DESCRIPTION
PULSE101A	Pulse Data Logger
IFC200	Software, manual and USB interface cable
LTC-7PN	Replacement battery for Pulse101A

**ASK ABOUT OUR OTHER DATA LOGGERS**

- Temperature
- Humidity
- Pressure
- pH
- Level
- Shock
- LCD Display
- Pulse/Event/State
- Current
- Voltage
- Wireless
- Intrinsically Safe
- Spectral Vibration
- Motion