

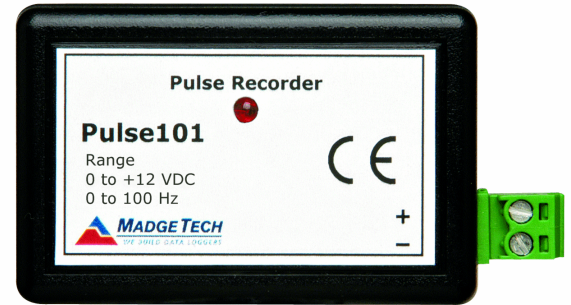
## FEATURES

- ❖ Up to 100Hz input
- ❖ User programmable time bins
- ❖ Programmable engineering units
- ❖ Interfaces to pulse output flow meters and contact closures
- ❖ Real time operation
- ❖ Miniature size
- ❖ User-friendly
- ❖ Reusable
- ❖ Low cost

## Applications

- ❖ Remote monitoring of contact closures
- ❖ Remote counting and totalizing
- ❖ Flow rate recording
- ❖ Gas and water metering
- ❖ Traffic studies
- ❖ Frequency recording
- ❖ Speedometer/rotational speed indicator

The Pulse101 is a miniature, low-cost recording device which senses pulse inputs or contact closures from external sources such as transducers and/or pulse initiators. It can collect as many as 100 pulses per second and store up to 16,383 totalized pulse counts in its non-volatile memory. The device can be started and stopped directly from a computer and its small size allows it to fit almost anywhere.

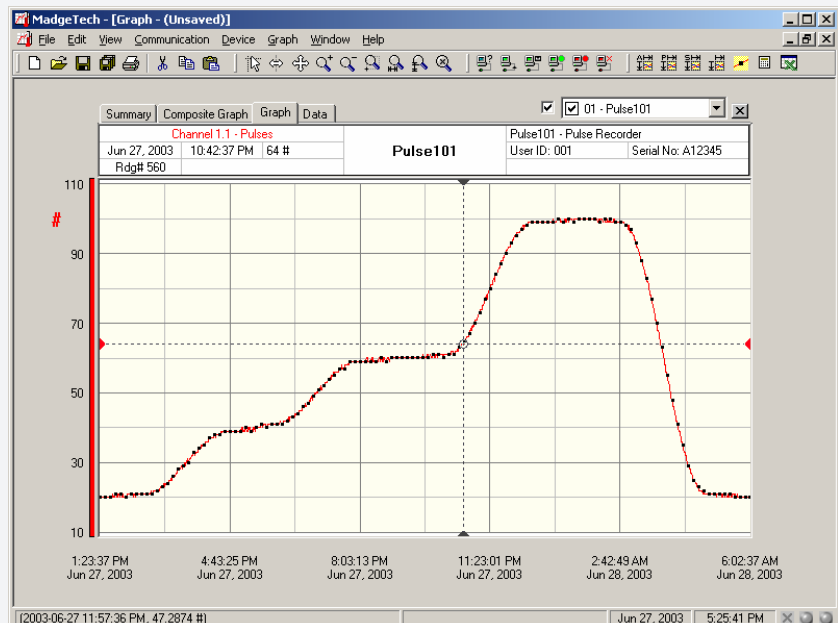
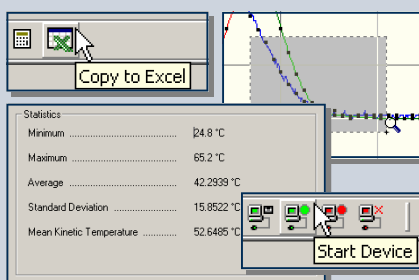


A common application for the Pulse101 is to measure the flow rate or total volume of a pipeline. With programmable engineering units available, the user has the ability to scale the data collected into useable units, such as gallons per minute. This unique option enables the user to easily linearize and scale most any transducer that provides a pulse or contact closure output to the user required units.

The MadgeTech software will effortlessly show statistical information based upon the type of unit stored in the device. If additional analysis is necessary, one click of a button will export the data into an MS Excel® spreadsheet for further analysis.

## SOFTWARE

MadgeTech's Data Recorder Software is an easy to use Windows-based software package that allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.



## PULSE101 SPECIFICATIONS

<b>Input Connection:</b> Removable screw terminal	<b>Start Time:</b> Software programmable start time and date, up to six months in advance.
<b>Input Low:</b> < 0.4 V	<b>Memory:</b> 16,383 readings, software configurable memory wrap
<b>Input High:</b> > 2.7 V	<b>Reading Interval:</b> 1 reading every second to 1 every 12 hours
<b>Input Range:</b> 0 to 12VDC continuous (0 to 30VDC peak)	<b>Visual Indicator:</b> LED flashes at selected reading rate.
<b>Input Impedance:</b> >1 k $\Omega$	<b>Power:</b> 3.6V lithium battery included
<b>Minimum Pulse Width/Contact Closure Time:</b> 1 millisecond	<b>User Replaceable Battery:</b> 1 year typical
<b>Maximum Pulse Rate:</b> 100 per second (10 ms)	<b>Data Format:</b> Date and time stamped V, mV, $\mu$ V, user defined engineering units.
<b>Engineering Units:</b> Software programmable. User may program any desired units up to 10 characters. Value is stored in device.	<b>Time Accuracy:</b> $\pm$ 1 minute/month at 20 °C (RS232 cable not in use)
<b>Scale Factor:</b> Software programmable. User may program any desired scaling factor from $\pm$ 1.0000E-31 to $\pm$ 9.9999E+31. The factor is stored in the device.	<b>Computer Interface:</b> PC serial or RS232C COM (Interface cable required); 2,400 baud
<b>Offset Value:</b> Software Programmable. User may program any desired offset value from $\pm$ 1.0000E-31 to $\pm$ 9.9999E+31. The factor is stored in the device.	<b>Software:</b> Windows 95/98/ME/NT/2000/XP based software
<b>Real Time Recording:</b> May be used with PC to monitor and record data in real time.	<b>Operating Environment:</b> -40 to +80 °C, 0 to 95 %RH non-condensing
	<b>Dimensions:</b> 1.4" x 2.6" x 0.6" (36mm x 66mm x 16mm)
	<b>Weight:</b> 0.9 oz (24 g)
	<b>Materials:</b> ABS plastic
	<b>Approvals:</b> CE compliant

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212°F, INCINERATE OR EXPOSE CONTENTS TO WATER.

## SOFTWARE FEATURES

<b>Multiple Graphs:</b> Simultaneously analyze data from several units or deployments; easily switch to a single data series	<b>Statistics:</b> Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
<b>Real-Time Recording:</b> Collect and display data in real-time while continuing to log	<b>Export Data:</b> Export data in a variety of common formats, or switch to Excel with a single click
<b>Graphical Cursor:</b> One click displays readings by time, value, parameter or sample number	<b>Calibration:</b> Fully digital calibration function automatically stores parameters in device
<b>Data Table:</b> Instantly access tabular view for detailed dates, times, values, and annotations	<b>Logger Configuration:</b> Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
<b>Scaling Options:</b> Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Communications:</b> Automatically sets up communications port, or lets user set configuration
<b>Formatting Options:</b> Change colors, line styles, plotting options, show or hide channels in an instant	<b>Printing:</b> Automatically print graphical or tabular data

\*Specifications are subject to change without notice. Specific warranty and remedy limitations apply. Call 1-603-456-2011 or go to [www.madgetech.com](http://www.madgetech.com) for details.

### ORDERING INFORMATION

Model	Description
PULSE101	Pulse Recorder
IFC110	Software, Manual & 9 pin Computer Interface Cable

### ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Voltage
Humidity	Current
Pressure	Submersible
pH	Intrinsically Safe
Level	RF Transmitters
Shock/Vibration	Multi-parameter
Pulse/Event	



201 Route 103 West - PO Box 50 · Warner, NH 03278  
 Phone: (603) 456-2011 · Fax: (603) 456-2012  
[info@madgetech.com](mailto:info@madgetech.com) · [www.madgetech.com](http://www.madgetech.com)