PULSE101
PULSE DATA LOGGER

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. Start and stop the device 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.
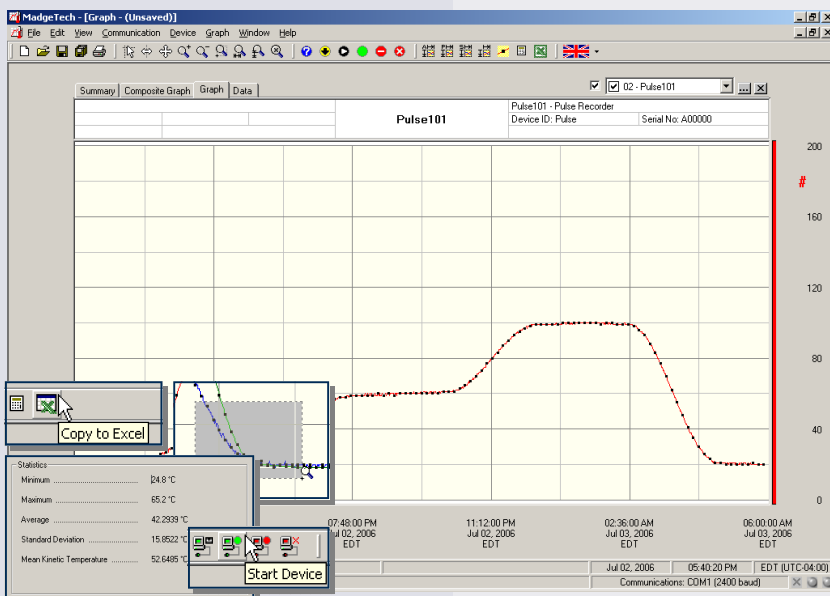
MadgeTech Data Recorder Software displays pulse data in an easy to use graph.

The Windows®-based software package 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.

Click MadgeTech Software for more information or to download the software.

PULSE101 SPECIFICATIONS*

Input Connection:	Removable screw terminal
Maximum Pulse Rate:	100Hz (10 ms)
Input Range:	0 to 12VDC continuous; (0 to 30VDC peak)
Input Low:	< 0.4 V
Input High:	> 2.7 V
Internal Weak Pull-Up:	<500µA
Input Impedance:	>1 kΩ
Recommended Duty Cycle for inputs greater than 12VDC (over 1 min. interval):	18V: <50% 24V: <25% 30V: <10%
Minimum Pulse Width/ Contact Closure Time:	1 millisecond
Engineering Units:	Software programmable. User may program any desired units up to 10 characters. Value is stored in device.
Scale Factor:	Software programmable. User may program any desired scaling factor from ±1.0000E-31 to ±9.9999E+31. The factor is stored in the device.
Offset Value:	Software Programmable. User may program any desired offset value from ±1.0000E-31 to ±9.9999E+31. The factor is stored in the device.

Real Time Recording:	May be used with PC to monitor and record data in real time.
Start Modes:	Software programmable immediate start or delay start up to six months in advance.
Memory:	16,383 readings; software configurable memory wrap
Reading Rate:	1 reading every second to 1 every 12 hours
Visual Indicator:	LED flashes at selected reading rate.
Battery Type:	3.6V lithium battery included; **user replaceable**
Battery Life:	1 year typical
Data Format:	Date and time stamped V, mV, µV, user defined engineering units.
Time Accuracy:	±1 minute/month at 20 ºC (RS232 cable not in use)
Computer Interface:	PC serial or USB (interface cable required); 2,400 baud
Software:	Windows 95/98/ME/NT/2000/XP/Vista based software
Operating Environment:	-40 to +80ºC, 0 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: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212ºF, INCINERATE OR EXPOSE CONTENTS TO WATER.

SOFTWARE FEATURES

Multiple Graphs:	Simultaneously analyze data from several units or deployments; easily switch to a single data series
Graphical Cursor:	One click displays readings by time, value, parameter or sample number
Data Table:	Instantly access tabular view for detailed dates, times, values, and annotations
Scaling Options:	Autoscale function fits data to the screen, or allows user to manually enter their own values
Formatting Options:	Change colors, line styles, plotting options, show or hide channels quickly

Statistics:	Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
Export Data:	Export data in a variety of common formats, or switch to Excel® with a single click
Calibration:	Automatically calculate and store calibration parameters
Logger Configuration:	Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
Communications:	Automatically sets up communications port, or lets user select configuration

*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.)
PULSE101	Pulse Recorder	$99.00
IFC110	Software, manual and RS232 interface cable	$99.00
IFC200	Software, manual and USB interface cable	$119.00
LTC-7PN	Replacement battery for Pulse101	$10.00

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration
LCD Display	

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WE BUILD DATA LOGGERS