



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

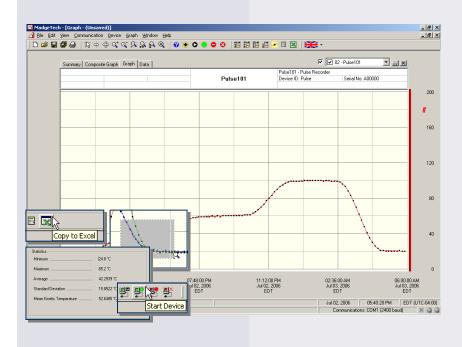
- Remote monitoring of contact closures
- Remote counting and totalizing
- Flow rate recording
- Gas and water metering
- Traffic studies
- Frequency recording
- Speedometer/rotational speed indicator



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.

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: $>1 k\Omega$

Recommended Duty Cycle 18V: <50% for inputs greater than 24V: <25% 12VDC (over 1 min. interval): 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 $\pm 1.0000E$ -31 to $\pm 9.9999E$ +31. The factor is stored in the device.

Offset Value: 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.

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 °C (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 +80°C, 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 212°F, 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.

LCD Display

ORDERING INFORMATION

<u>Model</u>	<u>Description</u>	
PULSE101	Pulse Recorder	
IFC110	Software, manual and RS232 interface cable	
IFC200	Software, manual and USB interface cable	
LTC-7PN	Replacement battery for Pulse101	

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

MADGE TECH