

Pulse 110 Data Logger

FEATURES

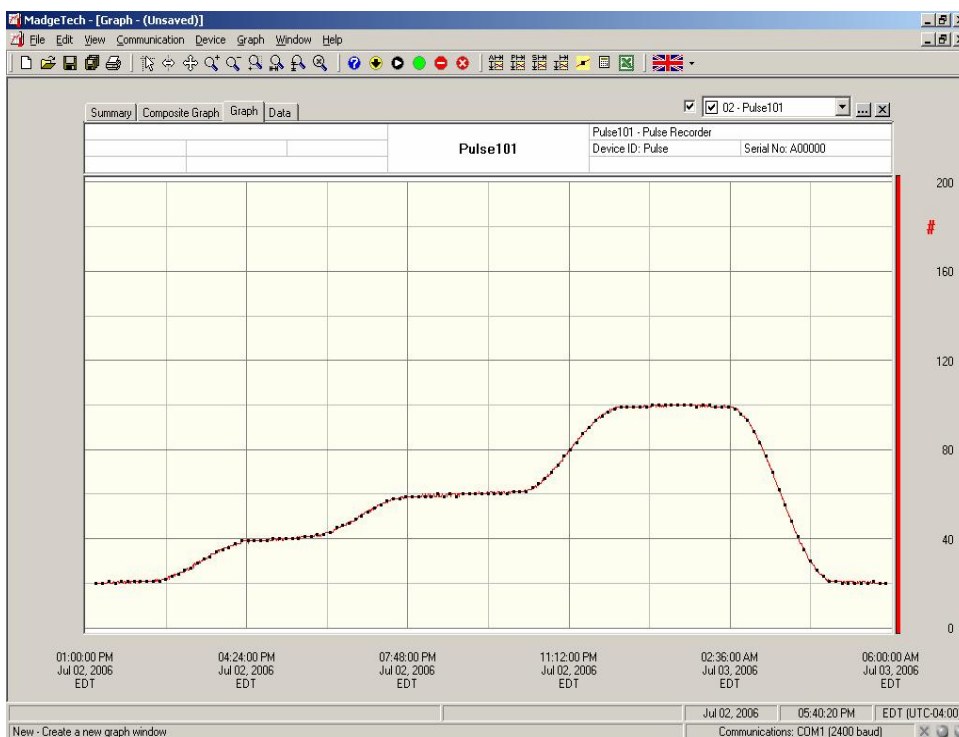
- High speed download
- Miniature size
- Reusable
- Interfaces to pulse output flow meters and contact closures
- Real time operation
- Programmable engineering units
- User-friendly
- Low cost

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
- Replace costly strip chart recorders



The Pulse110 is a miniature, low-cost, recording device which senses pulse inputs or contact closures from external sources such as transducers and/or pulse initiators and transforms them into usable engineering units for the specified time period. The device can store up to 16,383 readings. In addition, the Pulse110 allows the user to store user defined units such as gallons/min in the device as well as scale factors and offset values. This enables the user to easily scale any transducer that provides a pulse or contact closure output to the user required units. Once activated the Pulse110 senses and records the number of pulses/contact closures that occur over the user selected period. The device's real-time clock ensures that all data is time and date stamped. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The Pulse110 makes data retrieval quick and easy. Simply plug it into an empty COM port and our user-friendly software does the rest.



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.

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PULSE 110 SPECIFICATIONS

Input Connection:	Removable screw terminal	Real Time Recording:	May be used with PC to monitor and record data in real time.
Maximum Pulse Rate:	100Hz (10 ms)	Start Modes	Software programmable immediate start or delay start up to six months in advance.
Input Range:	0 to 12VDC continuous; (0 to 30VDC peak)	Memory:	16,383 readings; software configurable memory wrap
Input Low:	< 0.4 V	Reading Rate:	1 reading every second to 1 every 12 hours
Input High:	> 2.7 V	Visual Indicator:	LED flashes at selected reading rate
Internal Weak Pull-Up:	<500 μ A	Battery Type:	3.6V lithium battery included; user replaceable
Input Impedance:	>1 k Ω	Battery Life:	At 15 min. reading rate @ 25°C: Up to 1 year (25 Hz input) Up to 5 years (< 1Hz input) Up to 10 years (< 0.1 Hz input)
Recommended Duty Cycle for inputs greater than 12VDC (over 1 min. interval):	18V: <50% 24V: <25% 30V: <10%	Data Format:	Date and time stamped V, mV, μ V, user defined engineering units.
Minimum Pulse Width/ Contact Closure Time:	4 millisecond	Software:	Windows 95/98/ME/NT/2000 /XP/Vista based software
Engineering Units:	Software programmable. User may program any desired units up to 10 characters. Value is stored in device.	Time Accuracy:	\pm 1 minute/month at 20°C (RS232 cable not in use)
Offset Value & Scale Factor:	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.	Operating Environment:	-40 to +80°C, 0 to 95%RH non-condensing

SOFTWARE FEATURES

Multiple Graphs:	Simultaneously analyze data from several units or deployments; easily switch to a single data series	Statistics:	Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
Graphical Cursor:	One click displays readings by time, value, parameter or sample number	Export Data:	Export data in a variety of common formats, or switch to Excel® with a single click
Data Table:	Instantly access tabular view for detailed dates, times, values, and annotations	Calibration:	Automatically calculate and store calibration parameters
Scaling Options:	Autoscale function fits data to the screen, or allows user to manually enter their own values	Logger Configuration:	Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
Formatting Options:	Change colors, line styles, plotting options, show or hide channels quickly	Communications:	Automatically sets up communications port, or lets user select configuration

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

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