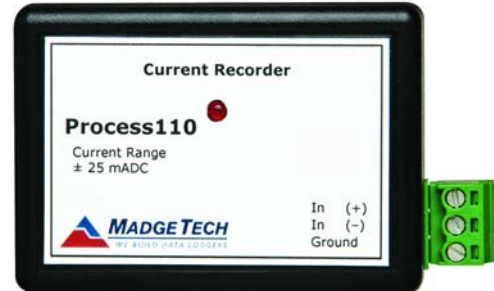


Features

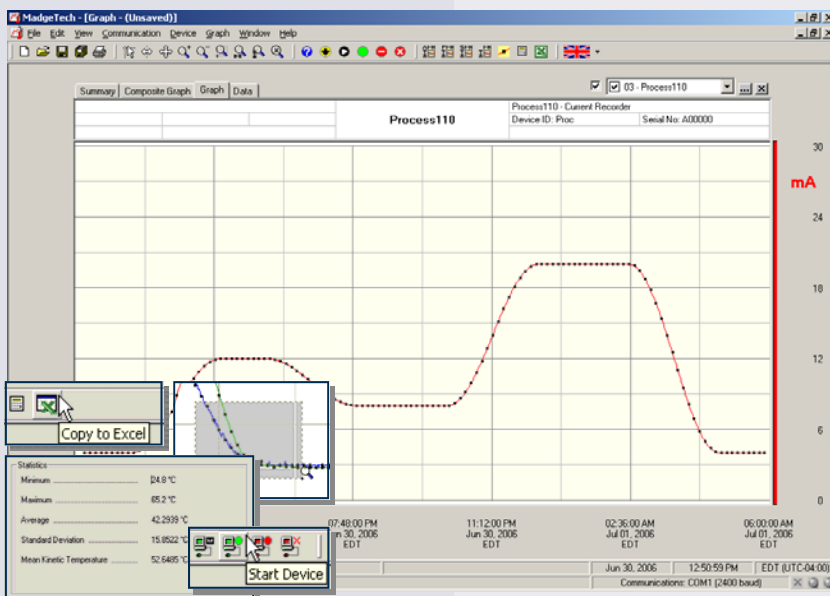
- 10 year battery life
- Programmable engineering units
- High speed download
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- User-friendly

Applications

- 4 to 20 milli-Amp recording
- pH recording
- Low level signal monitoring
- Battery studies
- Photovoltaic studies
- Biological sensor monitoring
- Environmental studies
- Remote data logging
- Factory process control



The Process110 is a miniature, battery powered, stand alone current recorder. The Process110 features a real-time clock module that extends the battery life to >10 years and allows for high speed downloads. This is an all-in-one compact, portable, easy to use device that will measure and record up to 32,767 measurements. 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 Process110 makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.



MadgeTech Data Recorder Software

displays current 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.

PROCESS110 SPECIFICATIONS*

Nominal Range:	$\pm 1\text{mA}$	$\pm 25\text{mA}$	$\pm 100\text{mA}$
Measurement Range:	$\pm 1.25\text{mA}$	$\pm 30\text{mA}$	$\pm 120\text{mA}$
+/- Input Voltage Range:	0 to 2.5V	0 to 2.5V	0 to 2.5V
Resolution:	0.05 μA	1 μA	5 μA
Calibrated Accuracy:	$\pm 0.5\%\text{FSR}$	$\pm 0.1\%\text{FSR}$	$\pm 0.1\%\text{FSR}$
Input Impedance:	50 Ω	10 Ω	10 Ω
Overload Protection:	$\pm 20\text{mA}$	$\pm 100\text{mA}$	$\pm 125\text{mA}$
Input Connection:	Removable screw terminal		
Analog Conversion Time:	133ms		
Frequency Rejection:	60Hz		
Temperature Coefficient:	< 100 ppm/ $^{\circ}\text{C}$; < 50 ppm/ $^{\circ}\text{C}$ typical		
Engineering Units:	User may define units up to 10 characters in length. This value is stored within the device.		
Scale Factor:	User may program any desired scaling factor from $\pm 1.000\text{E}-31$ to $\pm 9.999\text{E}+31$. The scaling factor is stored within the device.		
Start Modes:	Software programmable immediate start or delay start up to six months in advance		

Memory:	32,767 readings; software configurable memory wrap
Reading Rate:	1 reading every second to 1 every 12 hours
Real Time Recording:	May be used with PC to monitor and record data in real time
Specified Accuracy Range:	Nominal range @ 25 $^{\circ}\text{C}$
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	10 years (15 minute reading rate, 25 $^{\circ}\text{C}$)
Time Accuracy:	± 1 minute/month (at 20 to 30 $^{\circ}\text{C}$)
Data Format:	Date and time stamped A, mA, μA , engineering units specified through software
Software:	XP SP3/Vista/Windows 7
Computer Interface:	PC serial or USB (interface cable required); 57,600 baud
Operating Environment:	-40 to +80 $^{\circ}\text{C}$, 0 to 95%RH non-condensing
Dimensions:	1.7" x 2.7" x 0.8" (44mm x 69mm x 21mm)
Weight:	1 oz (30 g)

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 $^{\circ}\text{F}$, 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	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

*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

<u>Model</u>	<u>Description</u>	<u>Price (U.S.)</u>
PROCESS110-1mA	$\pm 1\text{mA}$ Current Recorder	\$299.00
PROCESS110-25mA	$\pm 25\text{mA}$ Current Recorder	\$299.00
PROCESS110-100mA	$\pm 100\text{mA}$ Current Recorder	\$299.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
LTC-7PN	Replacement battery for Process110	\$10.00

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	

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



DOC-1055009-00 REV E 2010.08.27