



Features

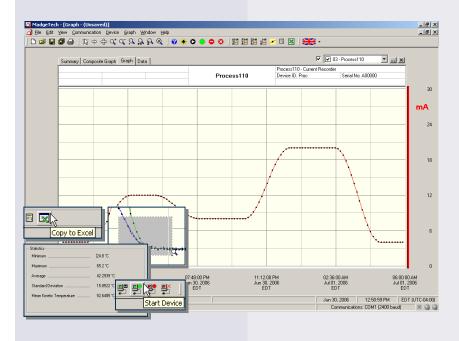
- 10 year battery life
- Programmable engineering units
- High speed download
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- User-friendly

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.

PROCESS110 SPECIFICATIONS*

Nominal Range:	±1mA	±25mA	±100mA
Measurement Range:	±1.25mA	±30mA	±120mA
+/- Input Voltage Range:	0 to 2.5V	0 to 2.5V	0 to 2.5V
Resolution:	0.05μΑ	1μA	5µA
Calibrated Accuracy:	±0.5%FSR	±0.1%FSR	±0.1%FSR
Input Impedance:	50Ω	10Ω	10Ω
Overload Protection:	±20mA	±100mA	±125mA

Input Connection: Removable screw terminal

Analog Conversion Time: 133ms **Frequency Rejection:** 60Hz

Temperature Coefficient: < 100 ppm/°C; < 50 ppm/°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 $\pm 1.000E$ -31 to $\pm 9.999E$ +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°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°C)

Time Accuracy: ±1 minute/month (at 20 to 30°C)

Data Format: Date and time stamped A, mA, µA, engineering

units specified through software

Software: Windows 95/98/ME/NT/2000/XP/Vista based

software

Computer Interface: PC serial or USB (interface cable required);

57,600 baud

Operating Environment: -40 to +80°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) 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.

ORDERING INFORMATION

<u>Model</u>	<u>Description</u>	
PROCESS110-1mA	±1mA Current Recorder	
PROCESS110-25mA	±25mA Current Recorder	
PROCESS110-100mA	±100mA Current Recorder	
IFC110	Software, manual and RS232 interface cable	
IFC200	Software, manual and USB interface cable	
NIST	N.I.S.T. Calibration Certificate	
LTC-7PN	Replacement battery for Process110	

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

