

PROCESS101A DC CURRENT DATA LOGGER



Features

- 10 Year Battery Life
- 4 Hz Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1 Million Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- NIST Traceable
- Field Upgradeable

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- 4 mA to 20 mA Recording
- pH Recording
- Low Level DC Current Monitoring
- Photovoltaic Studies
- Battery Studies
- General Purpose Current Recording



The Process101A is one of MadgeTech's newest data loggers. It is part of a new series of low cost, state-of-the-art data logging devices. MadgeTech has taken the lead in offering the most advanced, low cost, battery powered data loggers in the world today.

The Process101A is available in three ranges, 20mA, ±160mA and ±3A. All of the ranges offer a 10 year battery life, a 4 Hz reading rate, a multiple start/stop function, ultra-high speed download capability, 1 million reading storage capacity, optional memory wrap, battery life indicator, optional

Using the MadgeTech Software, starting, stopping and downloading from the Process101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in A, mA or μ A. The data can also be automatically exported to Excel® for further calculations.

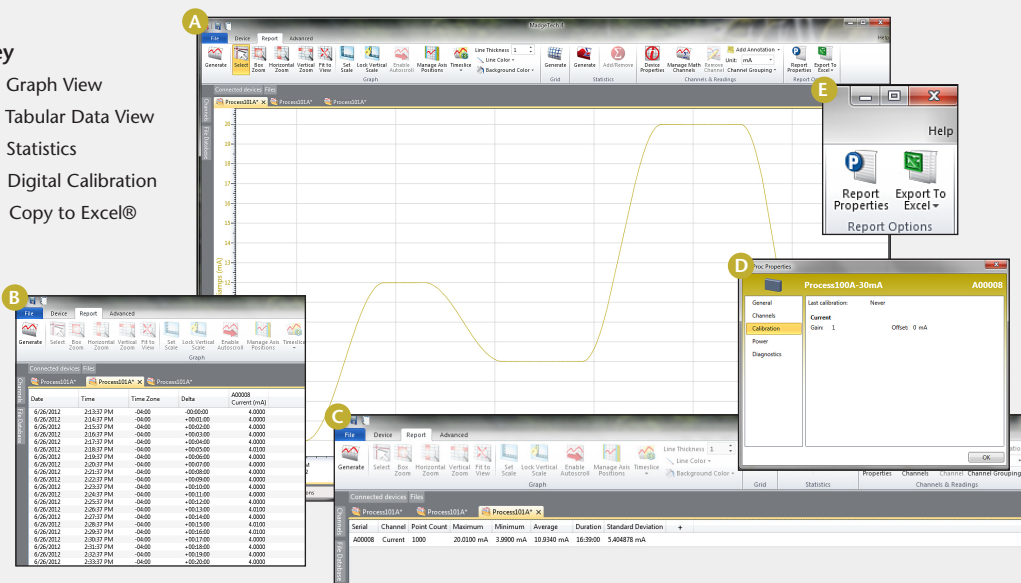
As the leader in low power data logger technology, MadgeTech continuously improves its products and develops solutions to meet ever-changing challenges. The Process101A was designed with our customers in mind. MadgeTech offers free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

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DATA LOGGER SOFTWARE

Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®

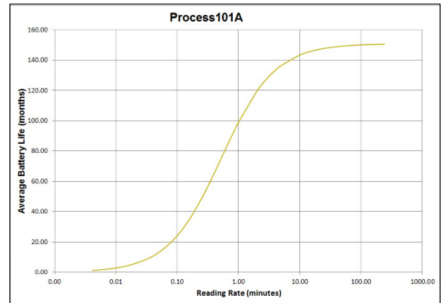


- ### Software Features:
- Multiple graph overlay
 - Statistics
 - Digital calibration
 - Zoom in/ zoom out
 - Lethality equations (F0, PU)
 - Mean Kinetic Temperature
 - Full time zone support
 - Data annotation
 - Min./Max./Average lines
 - Data table view
 - Automatic report generation
 - Summary view
 - Multilingual



PROCESS101A SPECIFICATIONS*

Nominal Range:	20mA	±160mA	±3A
Measurement Range:	-2 mA to +30 mA	±160 mA	±3 A
Maximum Voltage Between Inputs to Ground:	0 V to 2.5 V		
Resolution:	0.5 µA	5 µA	100 µA
Calibrated Accuracy:	±0.05 %FSR		±0.15 %FSR
Input Impedance:	10 Ω, ±1%	1 Ω, ±1%	<0.05 Ω
Absolute Maximum Current:	316 mA	1 A	6 A
Input Connection:	Removable screw terminal		
Analog Conversion Time:	133 ms nominal		
Frequency Rejection:	50-60 Hz		
Temperature Coefficient:	< +/- 50ppm/°C typical		
Reading Rate:	4 Hz to 1 reading every 24 hours		
Memory:	1,000,000 readings; software configurable memory wrap 333,000 readings in multiple start/stop mode		
Wrap Around:	Yes		
Start Modes:	<ul style="list-style-type: none"> • Immediate start • Delay start up to 18 months • Multiple pushbutton start/stop 		
Stop Modes:	<ul style="list-style-type: none"> • Manual through software • Timed (specific date and time) 		
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC		
Multiple Start/Stop Mode Activation:	<p>To start the device: Press and hold the pushbutton for 5 seconds. The device has started logging.</p> <p>To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash for three seconds and then the green LED will flash for two seconds. The device has stopped.</p>		
Real Time Recording:	The device may be used with PC to monitor and record data in real-time**		
Alarm:	Programmable high and low limits; alarm is activated when current reaches or exceeds set limits		
LED Functionality:	<p>Green LED blinks: 10 second rate to indicate logging 15 second rate to indicate delay start mode</p> <p>Red LED blinks: 10 second rate to indicate low battery and/or full memory</p>		

Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Engineering Units:	Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring voltage outputs from different types of sensors such as temperature, CO2, flow rate and more
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	10 year battery life typical, at a 15 minute reading rate  <p>Graph display of the device recording in a 25°C environment.</p>
Data Format:	Date and time stamped current, engineering units specified through software
Time Accuracy:	±1 minute/month (stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C, 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Weight:	0.9 oz (24 g)
Materials:	ABS plastic
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

**THE PROCESS101A-3A MAY ONLY BE USED WITH THE IFC200 "USB DRIVE" MODEL.

ORDERING INFORMATION

MODEL	DESCRIPTION
Process101A-20mA	±20 mA, Low Level Current Data Logger
Process101A-160mA	±160 mA, Low Level Current Data Logger
Process101A-3A	±3 A, Low Level Current Data Logger
IFC200	Software, manual and USB interface cable
*NIST	NIST Calibration Certificate
LTC-7PN	Replacement battery for Process101A

ASK ABOUT OUR OTHER DATA LOGGERS

Temperature
Humidity
Pressure
pH
Level
Shock
LCD Display
Pulse/Event/State
Current
Voltage
Wireless
Intrinsically Safe
Spectral Vibration
Motion

