

Description	QuadProcess	OctProcess	
Current Range			
Current Resolution	*See Table Below		
Calibrated Accuracy			
Input Impedance			
Channels	4	8	
Memory	32,767/channel	16,383/channel	
Reading Rate	1 reading every second up to 1 reading every 12 hours		
LED Indicator	None		
Required Interface Package	IFC200		
Baud Rate	2,400		
Typical Battery Life	1 year		
Operating Environment	-20 °C to +60 °C, 0 %RH to 95 %RH (non-condensing)		
Material	Anodized aluminum		
Dimensions	3.5 in x 4.4 in x 1.0 in (89 mm x 112 mm x 26 mm)	3.5 in x 4.4 in x 1.5 in (89 mm x 112 mm x 39 mm)	
Weight	13 oz (370 g)	17 oz (480 g)	
Approvals	-		

\*Current Series Range, Resolution and Calibrated Accuracy

Nominal Range	<u>+</u> 1 mA	<u>+</u> 25 mA	<u>+</u> 100 mA
Measurement Range	±1.5 mA	<u>+</u> 30 mA	<u>+</u> 120 mA
Common Mode Input Range	0 to 2.5 V	0 to 2.5 V	0 to 2.5 V
Resolution	0.05 µA	1 μΑ	5 μΑ
Calibrated Accuracy @ 25 °C	50 Ω	10 Ω	2 Ω

#### **Battery Warning**

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 60 °C (140 °F).

> Specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com

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**Product User Guide** 

**OctProcess and QuadProcess** 



Classific Constant Resorder

QuadProcess-1mA 4-Channel Low Level DC Current Data Logger

## QuadProcess-25mA

4-Channel Low Level DC Current Data Logger

### QuadProcess-100mA

4-Channel Low Level DC Current Data Logger



**OctProcess-1mA** 

OctProcess-25mA

OctProcess-100mA

Data Logger

Data Logger

Data Logger

8-Channel Low Level DC Current

8-Channel Low Level DC Current

8-Channel Low Level DC Current

To view the full MadgeTech product line, visit our website at www.madgetech.com.

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# Wiring the Data Logger

#### Wiring Options

The QuadProcess and OctProcess both have two-position removable screw terminal connections. The QuadProcess has 4 connections, the OctProcess has 8 connections. They accept 3-wire configurations.



Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.

## **Product Notes**

### **Engineering Units**

**Engineering units** are used to convert one measurement reading to another. The MadgeTech software allows for software level Engineering Units (conversion applied to data after download). Certain devices have device level Engineering Units, which upon download automatically appear in the chosen unit of measure.

Please refer to the application note "Engineering Units", found on the MadgeTech website, for information on how to manage Engineering Units. Also view the Engineering Units Video for step-by-step setup instructions.

# **Installation Guide**

#### Installing the Interface cable

- IFC200
- Insert the device into a USB port. The drivers will install automatically.
- IFC110

Plug the serial cable into the port and verify it is secure.

#### Installing the software

The Software can be downloaded from the MadgeTech website at the following link: www. madgetech.com/software-download. Follow the instructions provided in the Installation Wizard.

## **Device Operation**

#### Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select "**Custom Start**" from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click "**Start**". ("**Quick Start**" applies the most recent custom start options,

"Batch Start" is used for managing multiple loggers at once, "Real Time Start" stores the dataset as it records while connected to the logger.)

- The status of the device will change to "Running", "Waiting to Start" or "Waiting to Manual Start", depending upon your start method.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

### Downloading data from a data logger

- Highlight the data logger in the Connected Devices list. Click "Stop" on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click "**Download**". You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

### **Device Maintenance**

#### **Battery Replacement**

Materials: 3/32" HEX Driver (Allen Key) and a Replacement Battery (U9VL-J)

- Remove the cover from the device by unscrewing the four screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely. *Note: Be sure not to over tighten the screws or strip the threads.*

#### Recalibration

The QuadProcess or OctProcess standard calibration is at two points. The points are dependent on the range of the data logger.

#### Additional Services:

Custom calibration and verification point options available, please call for pricing.

Range	1 mA	25 mA	100 mA
<b>Calibration Points</b>	0 mA and .9-1 mA	0 mA and 22.5-25 mA	0 mA and 90-100 mA

Call for custom calibration options to accommodate specific application needs.

Prices and specifications subject to change. See MadgeTech's terms and conditions at <u>www.madgetech.com</u> To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting <u>www.madgetech.com</u>, then under the services tab, select RMA Process.