

# Rain101A

## Rainfall Data Logging System



The Rain101A is a complete system to accurately measure and record rainfall over long periods of time. It comes complete with an Event101A data logger, weatherproof enclosure, tipping bucket rain gauge, 50 feet of cable and the IFC200 interface cable and software package.

It can record up to 6 inch of rainfall every hour and 338 feet of rainfall total. The Rain101A only records to memory when rainfall is present, maximizing the amount of time the system can record. Using the logger's built-in Engineering Units, the data can be offloaded and displayed in user-specified units (eg. inches, centimeters). The software can "totalize" the rain bucket tips, allowing easy viewing of the accumulated rainfall over the time period of interest.

The Rain101A features a 10 year battery life, 4Hz reading rate, a multiple start/stop function, ultra-high speed download capability, 838,041 reading storage capacity, optional memory wrap, battery life indicator, optional password protection and more.

### Features

- Water Resistant Housing for Logger
- High-Precision Tipping Bucket
- Records 0 to 338 feet of Rainfall
- Self-Emptying
- 10 Year Battery Life
- Multiple Start/Stop Function
- Rugged Construction
- Ultra High Speed Download
- Battery Life Indicator
- Optional Password Protection
- Field Upgradeable

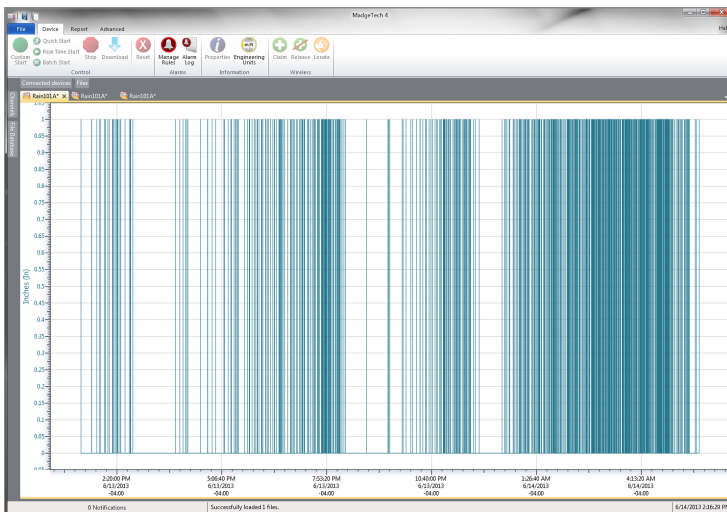
### Benefits

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

### Applications

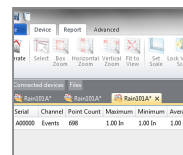
- Seasonal Rainfall Data Logging
- Irrigation Studies
- Precipitation Studies

## MadgeTech 4 Software Features

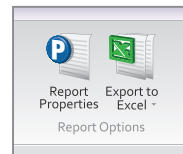


Graph View

- 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
- Summary view



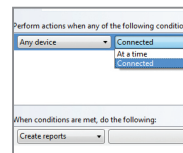
Statistics



Export to Excel

Time	Time Zone	Delta
1	1:13:37 PM	-04:00
1	1:14:37 PM	-04:00
1	1:15:37 PM	-04:00
1	1:16:37 PM	-04:00
1	1:17:37 PM	-04:00
1	1:18:37 PM	-04:00
1	1:19:37 PM	-04:00
1	1:20:37 PM	-04:00
1	1:21:37 PM	-04:00
1	1:22:37 PM	-04:00
1	1:23:37 PM	-04:00
1	1:24:37 PM	-04:00
1	1:25:37 PM	-04:00
1	1:26:37 PM	-04:00
1	1:27:37 PM	-04:00
1	1:28:37 PM	-04:00

Tabular Data View



Automation

## SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply.

MEASUREMENT	
Accuracy	±4% over range of 1 inch to 6 inch per hour
Orifice	8 in dia (204 mm dia)
Reed Switch Contact Rating	3 W, 28 VAC
Rainfall Per Bucket Tip	0.01 in (0.254 mm)
Mounting	(3) .25 in dia holes on 9.5 in dia. circle

GENERAL	
Start Modes	Immediate start Delay start up to 18 months Multiple pushbutton start/stop
Stop Modes	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
Real Time Recording	May be used with PC to monitor and record data in real time
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.
Memory	838,041 readings; software configurable memory wrap
Wrap Around	Yes
LEDs	2 status LEDs
Reading Rate*	4Hz to 1 every 24 hours

\*Device will record 1 event per reading interval.

Battery Type	3.6V lithium battery included; user replaceable
Battery Life	10 years typical, dependent upon frequency and duty cycle
Time Accuracy	±1 minute/month at 25 °C (77 °F) (Stand alone mode)
Computer Interface	USB (interface cable required); 115,200 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 2.04.06 or later Secure Software version 4.1.6.0 or later
Operating Environment	-20 °C to +80 °C (-4 °F to +176 °F) 0 %RH to 100 %RH
IP Rating	IP65
Dimensions	<b>Rain Gauge:</b> 12.0 in x 8.4 in dia (305 mm x 214 mm dia.) <b>Weatherproof Enclosure:</b> 3.5 in x 2.9 in x 1.1 in (87 mm x 73 mm x 27 mm)
Construction Materials	<b>Funnel:</b> anodized aluminum; base, body and bracket <b>Tipping Bucket:</b> PVC
Material	Polycarbonate
Weight	<b>Rain Gauge:</b> 10 lbs (4.5 kg) <b>Enclosure and data logger:</b> 9 oz (254 g)
Approvals	CE

**BATTERY WARNING:** FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

## Ordering Information

Rain101A	PN 901377-00	Rainfall data logging system, includes a tipping-bucket rain gauge, data logger, weather-proof enclosure, 250 feet of cable and the IFC200 interface cable
LTC-7PN	PN 900352-00	Replacement battery for the Rain101A