RAIN101A
RAINFALL DATA LOGGING SYSTEM

MADGETECH WE BUILD DATA LOGGERS

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

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.
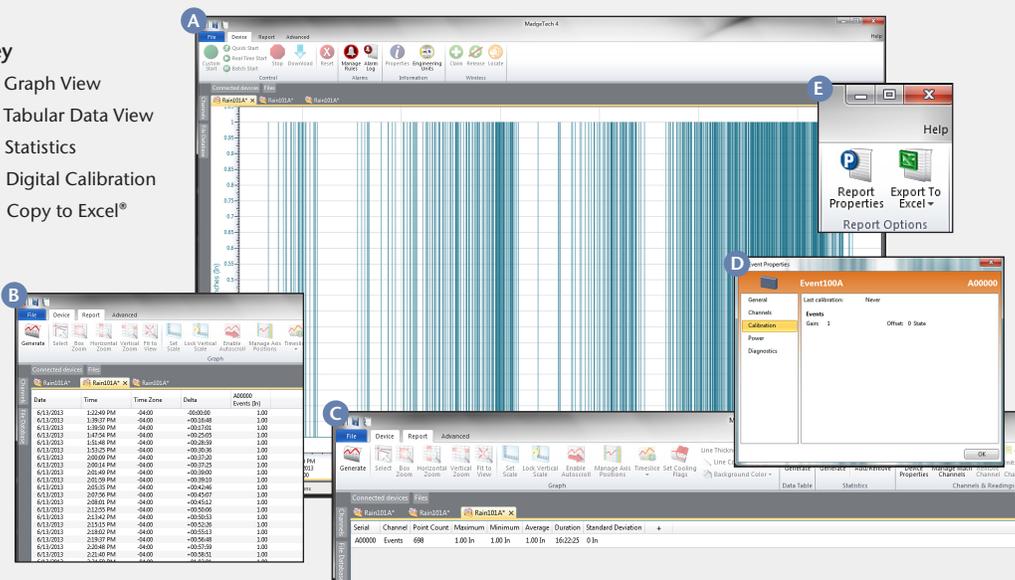
It can record up to 6 inch of rainfall every hour and 338 feet of rainfall total. The Rain101A only records to memory when rainfall is present, maximizing the amount of time the system can record. Using the logger's built-in Engineering Units, the data can be offloaded and displayed in user-specified 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, 406,323 reading storage capacity, optional memory wrap, battery life indicator, optional password protection and more.

MADGETECH DATA LOGGER SOFTWARE

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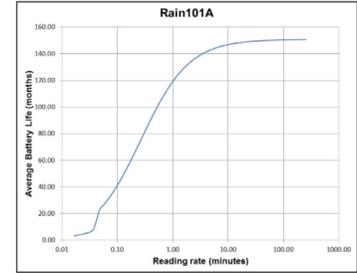- **E** Copy to Excel®

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

RAIN101A SPECIFICATIONS*

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
Reading Rate**:**	4Hz to 1 every 24 hours
Memory:	406,323 readings; software configurable memory wrap
Wrap Around:	Yes
Start Modes:	• Immediate start • Delay start up to 18 months • Multiple pushbutton start/stop
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:	To start the device: *Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.* 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 logging.*
Real Time Recording:	The device may be used with PC to monitor and record data in real-time
LED Functionality:	Green LED blinks: *10 second rate to indicate logging* *15 second rate to indicate delay start mode* Red LED blinks: *10 second rate to indicate low battery and/or full memory*
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.

Battery Type:	3.6 V lithium battery included; **user replaceable**
Battery Life:	10 years typical, dependent upon frequency and duty cycle

Graph display of the device recording in a 25°C environment.

Time Accuracy:	±1 minute/month (at 20 °C/68 °F, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	Windows XP SP3 or later
Operating Environment:	-20 °C to +80 °C (-4 °F to +176 °F), 0 %RH to 100 %RH
IP Rating:	IP65
Dimensions:	Rain Gauge: 12.0 in x 8.4 in dia (305 mm x 214 mm dia.) Weatherproof Enclosure: 3.5 in x 2.9 in x 1.1 in (87 mm x 73 mm x 27 mm)
Construction Materials:	Funnel: anodized aluminum; base, body and bracket Tipping Bucket: PVC
Weight:	Rain Gauge: 10 lbs (4.5 kg) Enclosure and data logger: 9 oz (254 g)
Materials:	ABS Plastic
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212ºF, INCINERATE OR EXPOSE CONTENTS TO WATER.

*Specifications are subject to change without notice.Specific warranty and remedy limitations apply. Call (603) 456-2011 or go to madgetech.com for details.

**Device will record 1 event per reading interval.

ORDERING INFORMATION

MODEL	DESCRIPTION
Rain101A	Rainfall data logging system, includes a tipping-bucket rain gauge, data logger, weatherproof enclosure, 250 feet of cable and the IFC200 interface cable and software package.
IFC200	Software, manual and USB interface cable
LTC-7PN	Replacement battery for Rain101A

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

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