

AUTOMATIC RAIN GAUGE STATION

Product Introduction

RK-ARG-5 having the industrial grade micro controller ensure the reliability, accuracy and continuous performance in the toughest weather condition. **RK-ARG-5** is the best choice for the research works in the market. Design makes easy to installed by one person and reduce the transportation cost. Automatic Rain Gauge all model comes with the tripod stand, solar panel and battery an intelligent solar and AC power circuit make the system self-powered.

Automatic Rain Gauge having the facility of the measuring the Logger Encloser Temperature, Rainfall. All the above model measuring the Data logger for the collection of real time data automatically. **16 X 2** alphanumeric display and **1 X 4** keypad is provided at front of data logger for programming data logger and monitoring sensor reading at site without the help of computer.

RK-ARG-5 rain gauge comes with the FAT certification and FAT calibrated Tipping bucket rain gauge.



Data Logger View

PROFESSIONAL LINE	SPECIFICATION
Model	Compact-datalogger version v-21.7
Display	16 Characters x 2 Lines alphanumeric display
Measured Parameter	Date, Time, Rainfall (mm), Temperature (°C), Battery (volts)
Real Time Clock	Stability long-term: ±1 ppm / year Stability (temperature): ±3.5 ppm or better form -40° to 85°C
Logging Rate	1 min to 1 hours
Data Storage	16 GB (sufficient for more than 2 years of logging in 1 min. logging rate)
Power supply	5 volts
Battery Life	< 3 years in continuous operation
Clock accuracy	±2 seconds per year
Battery Charging	Through solar panel or 220 Volts AC
IP rating	IP 65
Operating Temp.	-40°C to 75 °C
Operation Humidity	0 to 95% no-condensing
Data Retrieval	SD Card and RS 485 (Optional) No need of any software direct copy and past
Data Transmission	GPRS telemetry or WIFI in IOT (optional)
Watchdog timer	System Reset Upon Microprocessor Failure
Weatherproof encl.	IP 67 weatherproof enclosure provides Optional



Battery Charges and Battery

PROFESSIONAL LINE	SPECIFICATION
Model	BC-life6
Output Voltage	5 Volts DC
Protection	Reverse Polarity Battery over Charge Protection Battery over Discharged Protection
Battery Charging	Provided Inbuild solar charging Circuit through solar panel (6 V, 6 watts) 220 volts AC supply (optional)
Battery Life	More than 2 years
Advance Feature	Soft Start Charging or good health of battery Battery Temperature measurement inside Disconnect charging when temperature of batter goes high than normal





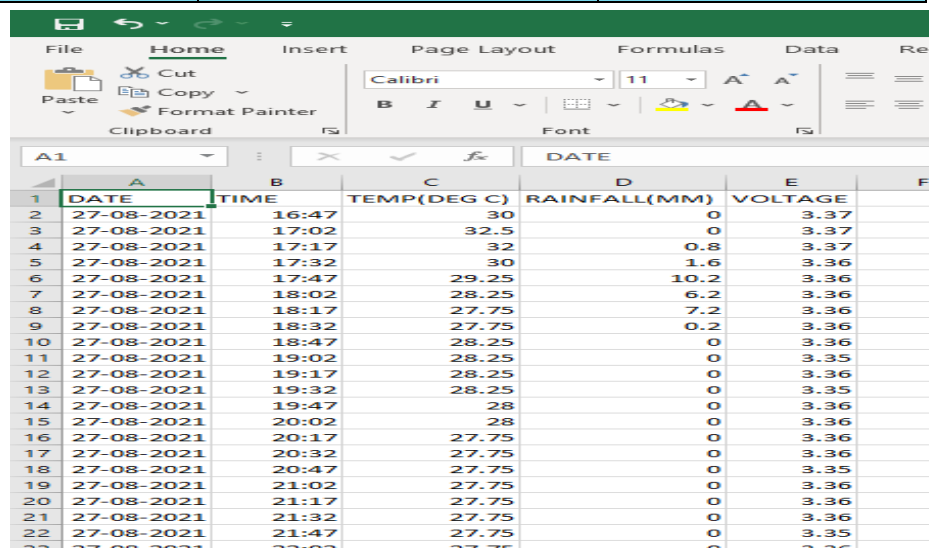
Meteorological Instruments

SENSOR SPECIFICATION

RAIN GAUGE	PROFESSIONAL LINE	SPECIFICATION	
	Type	Tipping Bucket Self Empty	
	Measuring intensity	~ 700 mm/ hours	
	Accuracy of rain gauge	100 mm / hour; better than ±4%	
	Rain Gauge Diameter	5 inches	
	Collection area	127 cm ²	
	Design	Aerocon for remove the wind effect	
	Resolution	0.254 mm or 0.20 mm	
	Operating condition	0°C to +70 °C / 0...100 %	
	Output	Switch / pulse output	
	Material	ABS	
	Capacity	Unlimited	

Optional Sensor for Ambient Air Temp and Humidity Monitoring

TEMP. AND HUMIDITY	PROFESSIONAL LINE	SPECIFICATION	AIR PRESSURE
	Measuring range temperature	-40° C to 123 ° C	
	Measuring humidity	0 to 100 %	
	Accuracy temperature	± 0.3 ° C @ 5 to 40° C	
	Accuracy rel. humidity	± 2% @ 20 to 80 %	
	Resolution of temperature	0.01 ° C Typical	
	Resolution rel. humidity	0.05 % RH Typical	
	Operating condition	-40°C to +70 °C @ 0...100 %	
	Supply voltage	0 to 5 volts	
	Weather shield	IP 65 provided	
	Dew point	Calculated Provided	
	Measuring range air pressure	300 hPa ~ 1100 hPa	
	Accuracy air pressure	±0.12hPa or better	



DATE	TIME	TEMP (DEG C)	RAINFALL (MM)	VOLTAGE
27-08-2021	16:47	30	0	3.37
27-08-2021	17:02	32.5	0	3.37
27-08-2021	17:17	32	0.8	3.37
27-08-2021	17:32	30	1.6	3.36
27-08-2021	17:47	29.25	10.2	3.36
27-08-2021	18:02	28.25	6.2	3.36
27-08-2021	18:17	27.75	7.2	3.36
27-08-2021	18:32	27.75	0.2	3.36
27-08-2021	18:47	28.25	0	3.36
27-08-2021	19:02	28.25	0	3.35
27-08-2021	19:17	28.25	0	3.36
27-08-2021	19:32	28.25	0	3.35
27-08-2021	19:47	28	0	3.36
27-08-2021	20:02	28	0	3.36
27-08-2021	20:17	27.75	0	3.36
27-08-2021	20:32	27.75	0	3.36
27-08-2021	20:47	27.75	0	3.35
27-08-2021	21:02	27.75	0	3.36
27-08-2021	21:17	27.75	0	3.36
27-08-2021	21:32	27.75	0	3.36
27-08-2021	21:47	27.75	0	3.35
27-08-2021	22:02	27.75	0	3.36

