Automatic Weather Station   Compact Series

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

BHM **Compact Series** AWS is categorized the four models **Compact 3 in 1** | **Compact 5 in 1** | **Compact 6 in 1** | **Compact 7 in 1** which can be selected by the user according the measuring weather parament.
Model **BHM-Compact-6 in1** data Logger having the facility of the measuring the Temperature, Wind Speed, Wind Direction, Relative Humidity, Dew Point, Solar Radiation and 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.

DATA LOGGER -VIEW

PROFESSINAL LINE	SPECIFICATION
Model	Compact-datalogger version v-21.7
Display	**16** Characters x **2** Lines alphanumeric display (Auto Light on when touch the keypad button)
Measured Parameter	Date, Time, Air Temp. (°C), Max Air Temp.(°C), Min Air Temp. (°C), RH (%), Max RH (%), Min RH (%), Wind Speed (m/s), Maximum wind speed (m/s), average wind speed (m/s), Wind Direction (Deg), Rainfall (mm), Air Pressure (hpa), Dew Point (°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 5 years of logging in 1 min. logging rate)
Logger Power supply	5 volts
RTC Battery Life	< 5 years in continuous operation
Clock accuracy	±5 seconds per year
Keypad	1 x 4 on front of the datalogger programming and check the sensors Realtime reading
Logger Programming	Through given keypad in front of the logger
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, SOLAR PANEL AND SOLAR CHARGE VIEW

PROFESSINAL LINE	SPECIFICATION
Model	BHM-COMPACT-BAT
Output Voltage	5 Volts DC
Protection	Reverse Polarity Battery over Charge Protection Battery over Discharged Protection
Battery Charging	Provided Inbuild solar charging Circuit through Battery management System OR 220 volts AC supply (optional)
Battery Life	More than 2 years
Battery Voltage & Amp	5 volts and 20 AMP
Advance Feature	Soft Start Charging or good health of battery Battery Temperature measurement inside Disconnect charging when temperature of batter goes high than normal
Solar Pannel	6 volts 2 Amp

SENSORS-VIEW

| Temperature & Humidity	PROFESSINAL LINE	SPECIFICATION	Air Pressure
Model: BHM-S-THA			
	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	

Wind Speed	PROFESSINAL LINE	SPECIFICATION	Wind Direction
Model: BHM-S-WS			Model: BHM-S-WD
	Measuring range wind direction	0 ° to 360 °	
	Measuring range wind speed	0.8 ... 50 m/s	
	Accuracy wind direction	1°	
	Accuracy wind speed	0.5 m/s at 0.8 ... 5 m/s and 2 % FS at 5.02... 40 m/s	
	Resolution of the wind direction	1°	
	Resolution wind speed	0.06 m/s	
	Operating condition	0...+70 °C • 0...100 %	
	Supply Voltage	0 to 5 volts	
	Material	Polycarbonate	
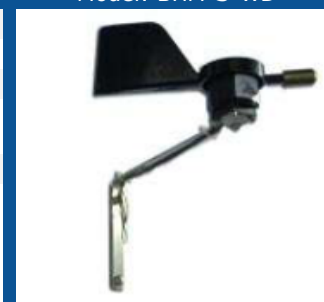
RAIN GAUGE	PROFESSINAL LINE	SPECIFICATION
Model: BHM-S-TBRG-5		
	Type	Tipping Bucket
	Measuring intensity	500 mm/ hours
	Accuracy of rain gauge	100 mm / hour, better than ±4%
	Collection area	127 cm²
	Design	Aerocon for remove the wind effect
	Resolution	0.20 mm
	Operating condition	0°C to +70 °C 0...100 %
	Output	Switch / pulse
	Material	ABS
	Capacity	Unlimited

Ordering Information

|	
BHM-compact-Datalogger	DATALOGGER
BHM-S-THA	Temperature, Humidity and Air Pressure Sensor
BHM-S-WS	Wind Speed Sensor
BHM-S-WD	Wind Direction Sensor
BHM-S-TBRG-5	Rainfall Sensor
Accessorises	
BHM-A-SSS	Stainless Steel Stand
BHM-A-SP	Solar Panel
BHM-compact-BAT	Battery with charging

SELECT YOUR MODEL

Model / Sensors	Compact 3 in 1	Compact 5 in 1	Compact 6 in 1	Compact 7 in 1	Compact 8 in 1
Temperature		✓	✓	✓	✓
Humidity		✓	✓	✓	✓
Rainfall		✓	✓	✓	✓
Wind speed	✓	✓	✓	✓	✓
Wind direction	✓	✓	✓	✓	✓
Solar radiation				✓	✓
Air Pressure	✓		✓	✓	✓
Open Pan Evaporation					✓
SS Tripod Stand	✓	✓	✓	✓	✓
Battery case	✓	✓	✓	✓	✓
Solar panel	✓	✓	✓	✓	✓
GPRS Telemetry	At Extra Cost	✓	✓	At Extra Cost	At Extra Cost
WIFI Telemetry	At Extra Cost	At Extra Cost	At Extra Cost	At Extra Cost	At Extra Cost
RS 485 data communication	At Extra Cost	At Extra Cost	At Extra Cost	At Extra Cost	At Extra Cost
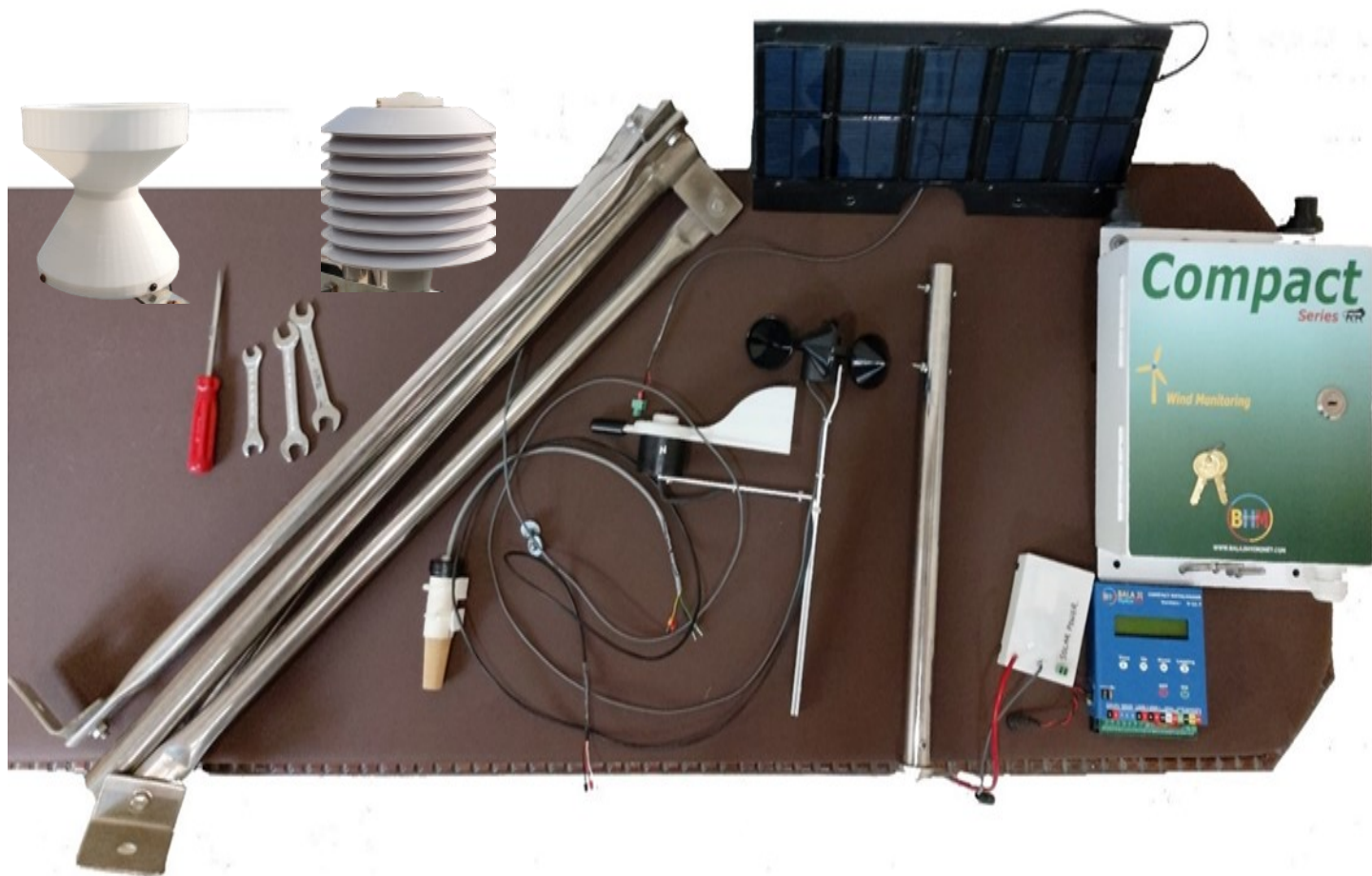
DATA Communication

DATA TRANSFER

Through SD card direct in Excel File no need of the software
Jus Copy and paste to your computer

WIFI COMMUNICATION (optional)

A WIFI shield provided with the PC software user enter the its modem or WIFI dongle User ID and Password and transmit the data to our server for storage and analysing the data. A cost-effective solution if the system installed in the WIFI range, reduced user internet and no need to purchase an individual SIM for a station.

Advantage of this feature for abroad user is that a WIFI dongle user connected to the logger given port. Either it is CDMA or GSM network dongle Logger push the

GPRS Modem

a) A GPRS enabled SIM is supposed to be installed in the modem. Based on the Sim Operator, the GPRS settings have to be configured in the modem.
b) Once a proper SIM card is inserted and the terminal is switched ON.it will automatically connected.
c) The terminal will continuously monitor serial port for messages received from the device connected.
d) When modem receives a valid command in the serial port. it will take appropriate action based on the commands.
e) Whenever the modem receives command from controller, it will be pushed through serial port.
f) Stores Failed GPRS packets in non-volatile memory until system re-stores proper GPRS connection to server (zero data loss).

RS 485 Communication (Optional)

A RS 485 communication provide optional, logger transmitted the data every 1-minute interval with date and time stamp.
A digital Running display also connected with this communication for the see the current data
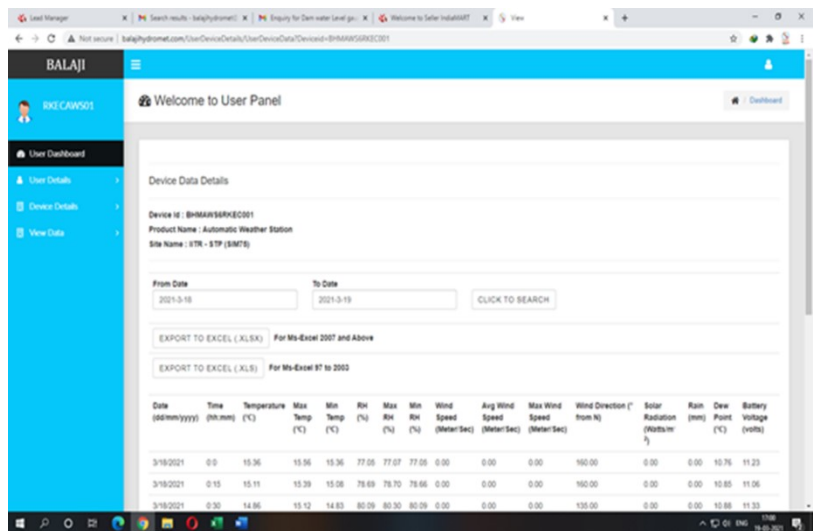
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*Drawing & Specification of the Product subjected to be change without any prior notice as per manufacturing suitability and future technology