

## AUTOMATIC WATER LEVEL RECORDER (NON-CONTACT)

### Overview

BHM Make **Radar Water Level Sensor model: BHM-S-WL-RADAR** outputs signal in form of the communication medium RS232/RS485/4-20 mA and SDI-12 etc to indicate distance and stage. This output is acceptable for recording devices capability, including Balaji Hydro Met Dataloggers.

BALAJI HydroMet makes **model BHM-DL-compactv21.7 Datalogger** having the industrial grade micro controller ensure the reliability, accuracy and continuous performance in the toughest weather condition. **Compact Series datalogger** 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 Water Level Recorder Radar comes with the tripod stand, solar panel, GSM/GPRS modem for telemetry communication and battery an intelligent solar and AC power circuit make the system self-powered. Combination of the above called as model **[BHM-H-WL-RD]**.

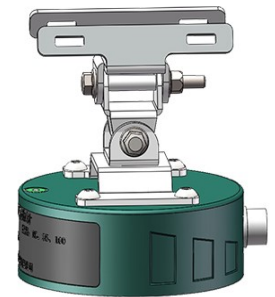


### Data Logger -View

PROFESSIONAL LINE	SPECIFICATION
<b>Model</b>	BHM-DL-compact V-21.7
<b>Display</b>	16 Characters x 2 Lines alphanumeric display (Auto Light on when touch the keypad button)
<b>Measured Parameter</b>	Date, Time, Current Water Level (mm), maximum water level (mm), minimum water level (mm), Battery (volts)
<b>Real Time Clock</b>	Stability long-term: $\pm 1$ ppm / year Stability (temperature): $\pm 3.5$ ppm or better form $-40^{\circ}$ to $85^{\circ}\text{C}$
<b>Logging Rate</b>	1 min to 1 hours
<b>Data Storage</b>	16 GB (sufficient for more than 5 years of logging in 1 min. logging rate)
<b>Logger Input supply</b>	5 volts
<b>Battery Life</b>	< 5 years in continuous operation
<b>Clock accuracy</b>	$\pm 5$ seconds per year
<b>Battery Charging</b>	Through solar panel or 220 Volts AC
<b>Keypad</b>	1 x 4 on front of the datalogger programming check the sensors Realtime reading and Logger Programming through given keypad in front of the logger
<b>Operating Temp.</b>	$-40^{\circ}\text{C}$ to $75^{\circ}\text{C}$
<b>Operation Humidity</b>	0 to 95% no-condensing
<b>Logger Data Retrieval</b>	Through SD Card, Android App in your mobile and RS (485) optional
<b>Data Transmission</b>	GPRS telemetry or WIFI in IOT (optional)
<b>Watchdog timer</b>	System Reset Upon Microprocessor Failure
<b>Weatherproof encl.</b>	IP 67 weatherproof enclosure provides Optional

### BATTERY, SOLAR PANEL AND SOLAR CHARGE VIEW

PROFESSIONAL LINE	SPECIFICATION
<b>Model</b>	BHM-COMPACT-BAT
<b>Output Voltage</b>	5 Volts DC
<b>Protection</b>	Reverse Polarity, Battery over Charge Protection Battery over Discharged Protection
<b>Battery Charging</b>	Provided Inbuild solar charging Circuit through Battery management System OR 220 volts AC supply (optional)
<b>Battery Type &amp; Life</b>	Lithium-ion battery with more than 2 years
<b>Battery Voltage &amp; Amp</b>	5 volts and 20 AMP Soft Start Charging or good health of battery
<b>Advance Feature</b>	Battery Temperature measurement inside Disconnect charging when temperature of batter goes high than normal
<b>Solar Pannel</b>	6 volts 2 Amp
<b>Battery Backup</b>	Up to 12 days (If no sunlight due to clouds or haze weather)



### RADAR LEVEL SENSOR -View

PROFESSIONAL LINE	SPECIFICATION
<b>Model</b>	<b>BHM-S-WL-RADAR</b>
<b>Make</b>	BHM
<b>Casing</b>	Aluminum
<b>Protection</b>	IP 68
<b>Measurement Range</b>	30/35/45m
<b>Communication interface</b>	RS-485
<b>Measurement Accuracy</b>	± 2 mm
<b>Frequency</b>	80Ghz
<b>Beam Angle</b>	8 deg
<b>Input voltage</b>	6 to 30 V (12 volts recommended)
<b>Repeatability</b>	± 1 mm
<b>Working temperature</b>	-20 to 65 deg
<b>Mounting</b>	Universal bracket

### Accessories - View

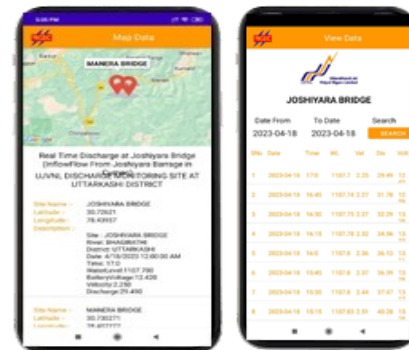
PROFESSIONAL LINE	SPECIFICATION
<b>Model</b>	<b>BHM-A-SSS</b>
<b>Make</b>	BHM
<b>Material</b>	Stainless Steel
<b>Height</b>	2 meters (or customizable according to site )



### Cloud Server – View

PROFESSIONAL LINE	SPECIFICATION
<b>Server</b>	Cloud based sever with purchaser User ID & Password
<b>Dashboard</b>	1 year access from the date of Invoice
<b>DATA</b>	<b>User detail, Mobile user, Device Detail, Device Data, Chart, Map, Alarm</b>
<b>Data showing</b>	In different color for more understanding Minimum (Blue), Normal (Green), Warning (yellow), Alert (Red)
<b>Data Graph/Chart</b>	Maximum Water level (mm), Minimum water level (mm), current water level (mm)
<b>Flood Data SMS Alert</b>	User selectable the Alarm Range (for Flood) And Registered SMS Alert maximum 5 mobile number through User dashboard.
<b>Data Download</b>	Set the Date, Month and Year and Download Data in Excel Format
<b>Map and Hover data</b>	Location Indicator Map and Show the Live Data on Hover the Location Symbol
<b>Android APP (Optional)</b>	Download the App from dashboard and Register the Mobile User App show the real time data, All Listed Device and location map
<b>Site Detail</b>	All more than 10 Station Cover under single user ID and password

	A	B	C	D	E	F
	Date (dd-MM-yyyy)	Time (hh:mm)	Water Level(mtr)	Velocity(mtr/sec)	Discharge(cumecs)	BatteryVoltage(Volts)
1	31-07-2022	0:0	1110.7	4.68	708.63	12.07
2	31-07-2022	0:15	1110.74	4.95	762.91	12.05
3	31-07-2022	0:30	1110.76	5.04	782.27	12.08
4	31-07-2022	0:45	1110.73	4.68	717.96	12.08
5	31-07-2022	1:0	1110.74	4.92	757.06	12.07
6	31-07-2022	1:15	1110.71	4.62	703.17	12.05
7	31-07-2022	1:30	1110.63	4.61	676.34	12.05
8	31-07-2022	1:45	1110.62	4.08	596.58	12.07
9	31-07-2022	2:0	1110.72	4.73	722.84	12.05
10	31-07-2022	2:15	1110.63	4.74	696.31	12.04
11	31-07-2022	2:30	1110.63	4.68	687.36	12.05
12	31-07-2022	2:45	1110.6	4.38	633.98	12.05
13	31-07-2022	3:0	1110.56	4.41	627.63	12.03
14	31-07-2022	3:15	1110.62	4.69	685.9	12.02



Installation at NHPC Jammu and Kashmir

