# **Digital Evaporation Recorder**





"Virtual" make Digital Evaporation Recorder is a fully computerized, digital and self-contained power source system, fitted with Data Logger and battery charging solar panel with rechargeable, maintenance free batteries complete with sensors mounted on a tripod stand with sealed waterproof enclosure for Data Logger, Solar charger and battery. All Sensors powered directly from Data Logger and no need of external power source (until specified). Standard System comes with facility to transport Data from Data Logger to a P.C. through a pocket able data shuttle. 16x2 alphanumeric display and 4x2 membrane keypad is provided at front panel of data logger for programming data logger and monitoring sensor reading at site without the help of computer. This system Comes with Auto Water Filling Option in PAN at extra cost.

# Features & Specifications:

- Sensor Type: Pressure type Evaporation Sensor
- Parameter Monitored: Date, Time, Level in Pan, Water Temperature (optional) & Battery Voltage.
- Display: 16 Characters X 2 Lines alphanumeric display,
- Keyboard: 4x2 membrane keypad for onsite programming of data logger.
- Real Time Clock accuracy: Internal with ± 2 minutes / year & leap year compensation
- Number of Channels: Eight (extendable up to 16 at extra cost). Channels Configuration: Factory

configured sensors as per purchase order.

- Settling time < 5 sec , Repeatability: ±0.05 % Full Scale
- Accuracy: ±0.1% Full Scale
- Memory: more than 16000 data sets (extendable @ extra cost). Store 1 year data at user's selectable 1 hour logging interval.
- ADC Resolution: 16+ bits
- Unattended recording of Water Level. Virtually maintenance free
- Logging Interval: 1 min to 24 Hr program log Start time within next 24 hours
- Operating Temperature: 40 to 75 °C. Humidity: 0 to 95 % non-condensing.
- Power Supply: 12V SMF battery, Charging: Solar Panel / 220V AC (Optional).
- Battery Life: More than 1.5 Years (Easily Available in local Market
- Solar Panel:: 12 Volt DC, Wattage: 10, 20 & 40 Watt (as per system power requirement)
- Along with Small Stainless Steel Tripod
- Data Output Format: MS- Excel
- Data retrieval: Data shuttle (default) to Computer. Other options also available (at extra cost).
- Auto Water Filling in PAN: Available at Extra Cost (One Water Tap should be available at installation Site)

#### Other options: Ethernet, 2G/3G/4G enabled Web based telemetry at Virtual's Portal "www.ehydromet.in".

Evaporation Sensor:

Sensor: Pressure Type Range: 30mm to 300 mm. Resolution: 0.1 mm Material Used: Non corrosive GI Pan Size: 1220 mm diameter. Pan Mounting: Timber Frame with Pan bird gauge (Square Steel mesh) Output: 4-20 m amp Comes with Vented cable for barometric pressure Compensation



# Application Software (Virtualware)

This is a user-friendly, Menu Driven, Windows based software allows you to view & save collected data from data logger to computer/laptop. Data file is saved in Microsoft's Excel format.

#### Ordering Guide:

ordering date:			
SN	Description	Model No.	Model No. (With Auto Water Filling in PAN)
1	DER with Data Shuttle option	DER-VH-D	DER-VH-A-D
2	DER with Ethernet option	DER-VH-D -E	DER-VH- A-D-E
3	DER with GPRS enabled WEB-Based Telemetry option	DER-VH-DGPRS	DER-VH- A-D-GPRS



### 🗲 Hydromet

1105/1, Salempur Rajputana Industrial Estate Roorkee- 247667, Haridwar, Uttarakhand, INDIA Tel:+91-7088-772-772, vhydromet@yahoo.com



Represented by:

\*\*Drawing / specifications are subjected to change at any time without prior notice as per manufacturing suitability.