# dipper-log

he **dipper-log** by Heron Instruments is an economical, single channel data logger for long term monitoring of groundwater levels in wells, boreholes and open bodies of water.

## Some of the quality features engineered into these units:

- The **dipper-log's** compact size allows it to be used in wells down to  $\frac{3}{4}$  inch (20mm) diameter.
- The dipper-log uses an absolute (total pressure) system. The system does not require vented cable which is subject to condensation and freezing.
- The **dipper-log** automatically takes barometrically compensated readings for short term tests. For longer term applications use a Heron barometric logger (the **bar-log**) to measure and record atmospheric pressure.
- The dipper-log uses popular Windows based software to initiate a mission and to retrieve, calculate and tabulate the data. A graphics package is available.
- The **dipper-log** system is designed and manufactured by Heron Instruments to be accurate, easy to use and economical.

# For draw down, recharge slug testing use reeled option for convenience and flexibility.

### What the dipper-log does:

- Stores 16000 time/dated readings in engineering or metric units.
- Records reading intervals in seconds, minutes, hours or days.
- Calculates and tabulates water levels in feet or meters.
- Allows preset start time/date.
- Takes barometrically compensated real time readings.

- Automatically recalibrates itself at the start of each mission.
- · Records depth below datum, job and well number.
- Allows you to set logger time/date.
- Stores all of the above information in the dipper-log.
- Synchronizes all reading on multi logger installations after the first unit reading. (i.e. min., hour, day)

### The dipper-log is easy to use:

- The dipper-log will not allow you to proceed with "setup" if required information is not entered.
- Recalibrates itself during set up.
- Stores default values for some parameters.
   (i.e. last barometric pressure, last calibration value)
- Automatically takes a barometric reading during set up for use in real time readings.
- The dipper-log and bar-log files are automatically matched to give barometrically compensated results.
- · Allows immediate or delayed start.
- Uses non volatile EEPROM memory. Data is not lost if battery fails or is removed.

- Simple to use Windows based software (for Win95, 98, ME, 2000 & XP) (graphics package available)
- Compact 5 inch (130mm) long x 0.72 inches (19mm) diameter logger unit.
- Convenient direct readings from the well head unit.
- Has an easy change camera style battery in the well head unit.
   The battery may be changed without removing the logger from the well. (Energizer EL 123 or equivalent)
- Accurate to 0.1% F.S (transducer)
- Slim 1/8 inch (3.1mm) flexible cable. Excess cable can be stored in the well.



### dipper-log designed and built by Heron Instruments

Logger Type	Max. readable head of water over logger*		
Α	Barometric	(bar-log)	
В	35ft /10m	(dipper-log)	
С	100ft/30m	(dipper-log)	
D	200ft /60m	(dipper-log)	
E	400ft / 120m	(dipper-log)	

When these water heads are exceeded the reading will "flat line" and the unit may be damaged.

### Total logging time at set intervals for 16000 readings:

Interval	Mins	Hours	Days	Years
Secs	266	4.4	-	-
Mins	-	266	-	-
Hours	-	-	666	1.8
Days	-	-	-	43

Change the battery every 12 months or at the start of each long term mission. For readings at second and minute intervals, change the battery after 25 cycles (16000 readings each cycle).

- **dipper-log** includes well head read out unit, universal head bracket and 50ft/15m cable

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- Extra cable available
- dipper-log software package\*
- Read out cable\*
- Barometric logger-bar-log (optional)\*\*
- Graphics package (optional)\*
- dipper-log on a reel (optional)
- \* May be used with multiple dipper-logs
- \*\*One unit should be used for each job site. (job number)









