

Encoder-Based Logging Sensor Specifications

Stage Discharge Recorder (SDR) is a Stage Level measurement sensor. SDRs have a 5/16 inch shaft that allows for different kinds and sizes of float wheels. They can accept a metric and standard wheels as well as chain or tape. SDRs have a built in logger that allows the multi setups and configurations based off of the users criteria. The SDR can compute discharge for standard weirs, partial flumes, and up to a 50 point rating table. SDRs are can act as a standalone logger or can be connected to a Data Collection Platform (DCP). The Shaft encoder can send data to a DCP via SD-12, Modbus, 4-20mA, or RS-232 protocols. They have a display to that allow the Shaft Encoder to wheel rotation for Clock Wise or Counter Clock Wise. The Shaft Encoder allows the user to set the units of output. The display also allows for the setting of the Stage Level.

- Must have dual sensor where user can setup logging sensor to measure a second stage using an analog or SDI-12 sensor.
- Must be able to compute discharge using a rating table with up to 50 points.
- Logging sensor must have stage/level range of +/-80 ft. of calibration point.
- Must be able to average stage by averaging multiple samples over a user-set period.
- Logger sensor must be able to have 4-20mA output with analog-SDR0001-4.
- Logging sensor must have flash memory and SD card option.
- Logging sensor must incorporate standard flume and weir equations.
- Must display discharge as well as flume and weir stage.
- Must have built-in event log that tracks data views, data downloads, and setup changes.
- Must be able to runs up to 1 year on an industrial alkaline battery.
- Must have data delivered in CSV files.
- Logging sensor must have front panel setup.
- Must have auto measure intervals of: 15-minute default/ 1, 5, & 10 minutes user selectable/ 30 and 60 minute intervals.
- Must support MODBUS slave, SCP, SDI-12 communication protocols.
- Logging sensor must have SDI-12 and RS232 communication ports.
- Must be front panel programmable.
- Logging sensor must be able to operate for over one year on alkaline batteries.
- Logging sensor must have a log file that does not erase and have 2 years of data storage.
- Units must come with 2 year warranty.