

ELAN

Technologies

Inc.



ELAN CSO MONITOR

COMBINED SEWER OVERFLOW MONITORING

The ELAN Technologies CSO Monitor is designed to monitor and data log the time and duration of CSO events. The CSO Monitor comes complete with a data logger in a weather tight case, a precision float switch or proximity switch and software.

In the field, the sensor is mounted to sense the overflow event. For a weir wall type, a float switch is supplied and mounted with the activation point in line with the overflow. For a tide gate type, a proximity switch is supplied and mounted on the gate. The supplied cable is then run to the monitor mounted at the manhole or structure entrance. The sensor connection to the monitor is made via watertight connector and the gasketed case provides excellent protection in harsh CSO environments.

In operation, the logger monitors date and time and logs when an event occurs. Using the supplied software, the logger is downloaded on a monthly basis in the field with a laptop PC or disconnected from the sensor and brought in to a desktop PC to download. The logged information includes the date and time of when events started and stopped as well as the exact duration of the event. This data can then be printed in a report, which can be attached to a Discharge Monitoring Report (DMR) or used to generate a DMR for submission to the EPA.

The logger lasts over one (1) year on a single battery and can accommodate over a month of data at 5-minute intervals, making it ideal for meeting CSO monitoring requirements.

Optional Field Installation and Monthly Service

In addition to equipment, ELAN can offer installation of the ELAN CSO monitor following OSHA confined space permit procedures. We also offer a monthly service to download ELAN CSO Monitors and provide you with data reports for each site, including local rainfall data. Contact ELAN Technologies for details.

Contact ELAN Technologies

ELAN also offers data logging rain gauges, multiple channel dataloggers, solar powered instruments and other innovative monitoring solutions. Contact ELAN Technologies at 815-463-8105 for details.



Rugged, weather-tight polypropylene enclosure with handle.



Connects easily to PC for data analysis.

- ELAN Designed
- Event Time, Duration
- Overflow or Tide-Gate type CSO
- Battery Powered
- Discharge Reports
- Economical

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ELAN Technologies CSO Monitor

Design Specifications

- Power: 3.6 v lithium cell. One (1) year life. (typical @ 25°C)
 - Enclosure: Weather tight gasketed polypropylene with handle; weather-tight gasketed sensor connector, 3 pin.
 - Logger:
 - Date and time stamped events, 45 days @ 5 minute intervals. (13,107 readings)
 - Non-volatile memory (no memory loss with battery loss).
 - Data retrieval via RS-232 serial com cable (supplied).
 - Operating Conditions, -40°C to +80°C; to 95% RH non-condensing.
 - Software: Windows 95/98/ME/NT/2000/XP compatible. For setup, data retrieval and reporting. Exportable to Excel
 - Dimensions: 9 ¼" W x 7 ¾" H x 4 ½" D
 - Float Switch: 316 SS float, stem. UL, CSA, CE, EX Class I, Grps ABCD; Class II Grps EFG; Class III. With PVC shroud, debris screen, bracket, (25') cable w/weather tight connector. 9/16" activation, (longer cable optional).
 - Proximity Switch: Stainless steel switch and target magnet. CSA/FM certified EX Class I, Grps ABCD; Class II Grps EFG; Class III. 75' cable with weather tight connector to match CSO monitor. 3/8" switch activation level.
- Specifications are subject to change without notice.*

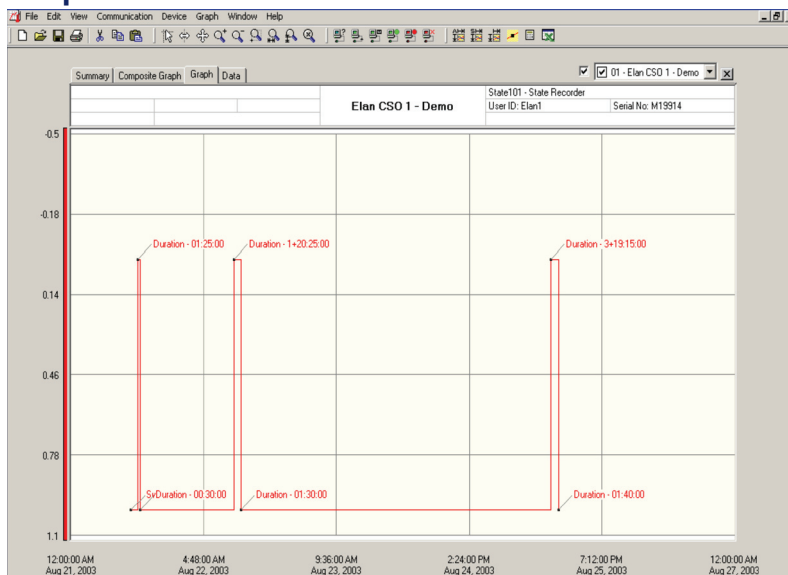
Report Examples

Tabular Report

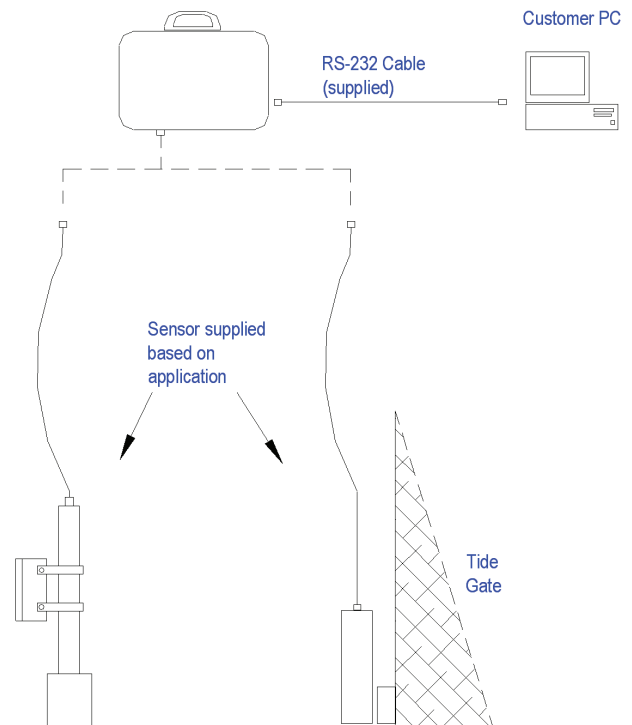
Elan CSO 1 - Demo						
Rdg #	Date	Time	State	Units	Annotation	
1	Aug 21, 2003	1:00:00 PM	1		Switch Initially Open	
2	Aug 21, 2003	2:25:00 PM	0		Duration - 01:25:00	
3	Aug 21, 2003	2:55:00 PM	1		Duration - 00:30:00	
4	Aug 22, 2003	11:20:00 AM	0		Duration - 1+20:25:00	
5	Aug 22, 2003	12:50:00 PM	1		Duration - 01:30:00	
6	Aug 25, 2003	8:05:00 AM	0		Duration - 3+19:15:00	
7	Aug 25, 2003	9:45:00 AM	1		Duration - 01:40:00	

3 events shown

Graph



System Schematic



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