

TRITON+® Flow Monitoring System **INCLINOMETER** Sensor



INCLINOMETER Sensor from ADS®

The INCLINOMETER sensor utilizes an integrated accelerometer in a sealed and intrinsically safe housing to accurately determine the state of a flood gate's positioning in water control and management systems. It is easily installed and supports a variety of sensor orientations.

Accelerometer-based angle detection

The INCLINOMETER measures the angle opening (+/-) of a flood gate in harsh environments. The angle measurement of the gate is logged at synchronous intervals based on the ADS **TRITON+®** data recording rate. If the opening (angle) exceeds a user-defined threshold an alert will be sent to notify the end user of the event.

INCLINOMETER Solutions

The INCLINOMETER sensor provides users with a rugged, precise measurement of movement for gates, hatches, valves or doors utilized in wastewater collection systems. It can be used in the following applications:

- **Real-Time Alarming of CSO Activations** - The movement data is essential for real-time alarming of CSO activations, particularly in areas that experience tidal or river influenced overflows. In these situations where receiving water bodies influence discharges, operators do not have certainty that overflows are occurring without the Inclinator showing gates as open or closed. The INCLINOMETER can also identify gates that are stuck open or leaky, contributing additional flow to the treatment process.
- **Bending Weir Overflow Volumes** - Use to directly measure overflow volume in a Bending Weir application by measuring the angle of the weir and the weir manufacturer-provided discharge table.
- **Intrusion Alarm** – Use to provide intrusion alerts when mounted on doors or hatches in the wastewater collection system.



Stainless steel screws



Stainless steel clamp



Construction adhesive



Zip tie in place

INCLINOMETER Sensor

Flood Gate Tilt Sensor Specifications



Housing	Solid molded ABS providing high impact and abrasion resistance in a fully sealed device
Dimensions	Height: 0.87 in. (2.21 cm) Width: 2.03 in. (5.16 cm) Length: 3.00 in. (7.62 cm)
Weight	1.5 lbs. (0.68 kg) including 25 ft. communication cable and connector
Operating Range	0 to 90°
Accuracy	+/- 0.25° between 0 and 40°
Resolution	0 to 60° = 0.03° 60 to 90° = 0.3°
Mounting Methods	Mount on any flat surface of the wastewater side of a closed flood gate, or closed door or hatch when monitoring for intrusion alarms Mount using construction adhesive Mount using stainless steel screws Mount using zip ties Mount using stainless steel clamp

Compatibility The **INCLINOMETER** sensor is ONLY compatible with the ADS **TRITON+**® flow monitor via the communication port



Qstart™XML - setup and activation

PRISM™ - provides angle entity and tilt alarms

Certifications The **Inclinometer** is developed and manufactured under the ISO 9001:2015 Quality Management Standard, and designed to meet the requirements for RoHS and IP68 standards.

Certified under the ATEX European Intrinsic Safety standards for Zone 0 rated hazardous areas

Certified under IECEx (International Electrotechnical Commission) Intrinsic Safety Standards for use in Zone 0 rated hazardous areas (equivalent to Class I, Division 1, Groups C & D)

CSA Certified to Class 225803 Process Control Equipment, Intrinsically Safe and Non-Incendive Systems – For Zone 0 Hazardous Locations, Ex ia IIB T3 Ga (152° C) in Canada

CSA Certified to Class 225883 Process Control Equipment, Intrinsically Safe and Non-Incendive Systems – For Class I Zone 0 Hazardous Locations, AEx ia IIB T3 Ga (152° C) in the USA (equivalent to Class I, Division 1, Groups C & D)



Learn More About **TRITON+**
www.adsenv.com/triton



Call: 800.633.7246
Email: adssales@idexcorp.com

