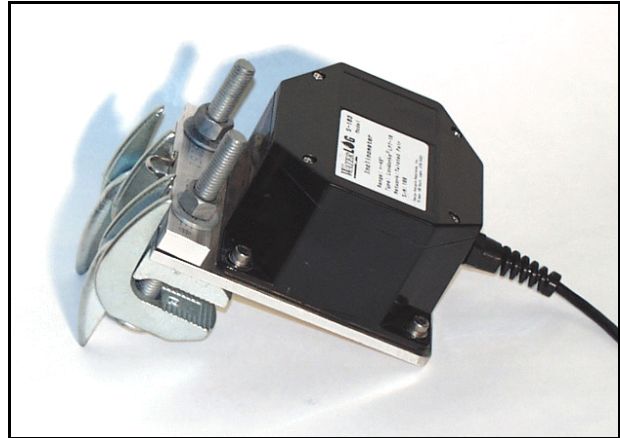


The **WATERLOG[®]** H-335 is a precision, single axis, wide range inclinometer which measures the angle (position) of radial water control gates. The H-335 is easy to use, works with any SDI-12 data recorder and can be interfaced with SCADA systems.



KEY FEATURES

- Easily attaches to I-beam of gate structure
- Scales gate position into user units of feet, inches, meters, etc.
- Built in intelligence automatically calculates both gate height and arc length
- SDI-12 digital interface supports multiple sensors on a simple three wire cable
- No hysteresis or backlash
- 0.03° Accuracy over full position and temperature range
- Sealed water-tight enclosure
- No moving parts or bearings
- Low system cost

APPLICATIONS

- Gravity referenced sensor allows installation anywhere on the gate structure (does not need to be on the center of the gates rotating axis)
- Easy to install, includes heavy duty mounting plate and 2 inch galvanized steel beam clamps
- Eliminates shaft encoders, gears, chains and other non-linear measurement



SPECIFICATIONS

General

Sensor: ceramic, single axis, linear, wide angle
Type: electrolytic fluid
Range: -40° to $+40^{\circ}$ (80° total)
Resolution: 0.005°
Accuracy: $\pm 0.03^{\circ}$ (absolute over full range)
(0.25 in. gate height with 36 ft. gate radius)
(0.13 in. gate height with 20 ft. gate radius)
Offset Adjust: software command with gate against sill
Temperature: -30° to $+50^{\circ}\text{C}$ (calibrated range)
Settling Time: $<300\text{ms}$

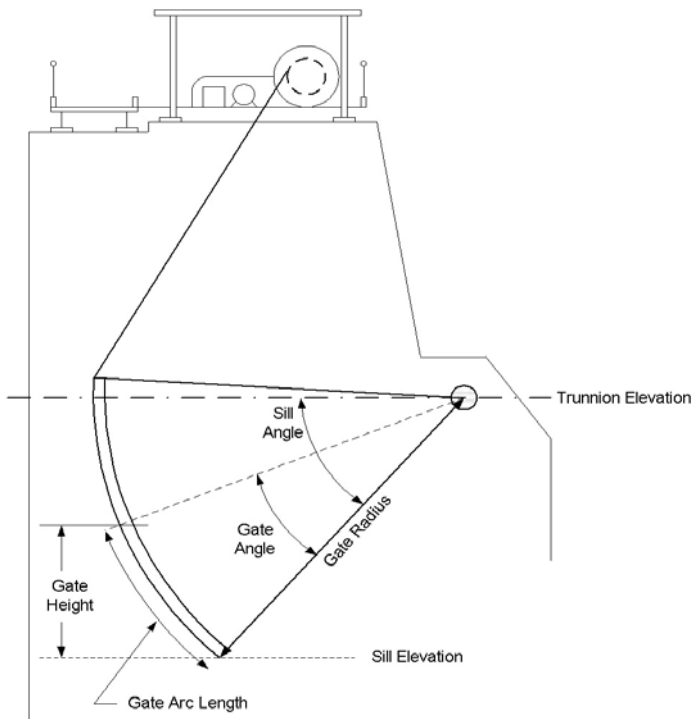
SDI-12 Measurement Time: 2 Seconds

SDI-12 Output

Baud Rate: 1200
Protocol: SDI-12, 7-bit even parity, 1 stop bit
Output Voltage Levels:
Minimum high level: 3.5 volts
Maximum low level: 0.8 volts
Maximum cable length: 250 ft.

SDI-12 Output Data Parameters:

- 1 - Gate Arc Length (ft., in., m., etc.)
- 2 - Gate Height (ft., in., m., etc.)
- 3 - Gate Angle (degrees)
- 4 - Temperature ($^{\circ}\text{C}$)



Gate Geometry

Power Requirements

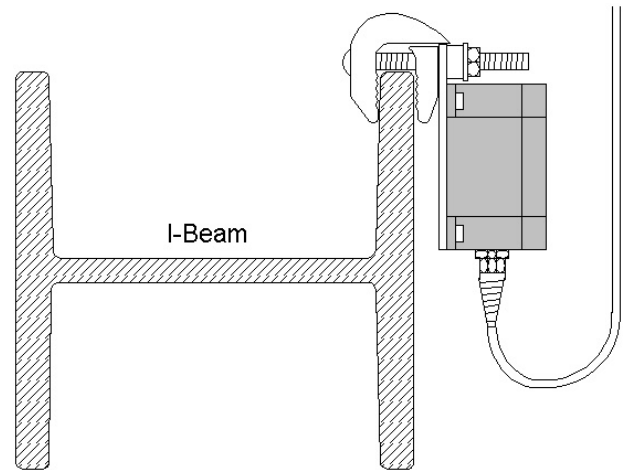
Voltage Input: 10.0 to 16.0 Volts DC
Current:
Measuring: 30 mA
Standby: 20 typical

Environmental

Operating Temperature: -30° to $+60^{\circ}\text{C}$
Storage Temperature: -50° to $+70^{\circ}\text{C}$

Mechanical

Material: 40% graphite filled fiberglass
Size: 4.76 in. x 4.76 in. x 2.5 in. high
Rating: NEMA 4X, 6
Connector: Liquid tight strain relief fitting
.08 in. to .24 in. diameter cable
Beam Clamp: 2-in. max I-beam thickness
Cable: Not included
Recommended Cable: Polyurethane or similar, rated for water immersion and sunlight resistance.



H-335 Mounted on a Steel I-beam

Warranty

The **WATERLOG**® H-335 is warranted against defects in materials and workmanship for one year from date of shipment.

Note

Specifications subject to change without prior notice due to on going commitment to product testing and improvement. LR April 7, 2003

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