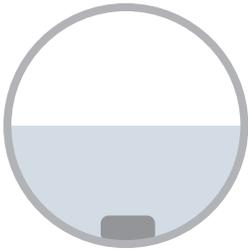


# TRITON+<sup>®</sup>

## Sensor Specifications

The ADS<sup>®</sup> TRITON+<sup>®</sup> features three depths and two velocities with five sensor options. Each sensor provides multiple technologies for continuous running of comparisons.



### Peak Combo Sensor

This versatile and economical sensor includes three measurement technologies in a single housing: ADS-patented continuous wave *peak velocity*, *uplooking ultrasonic depth*, and *pressure depth*.

<b>Dimensions</b>	<b>Height:</b> 0.83 in (21 mm), <b>Width:</b> 1.23 in (31 mm), <b>Length:</b> 6.76 in (172 mm)
<b>Continuous Wave Velocity</b>	<b>Operating Range:</b> -30 fps to +30 fps (-9.1 m/s to +9.1 m/s) <b>Resolution:</b> 0.01 fps (0.003 m/s) <b>Accuracy:</b> +/- 0.04 fps (0.01 m/s) in velocities < 1 fps; +/- 2% of actual velocity in velocities > 1 fps (0.30 m/s) in uniform flow
<b>Uplooking Ultrasonic Depth</b>	Performs with rotation of up to 15 degrees from the center of the invert; up to 30 degrees rotation with Silt Mount Adapter <b>Operating Range:</b> 1.0 in (25 mm) to 5 ft (152 cm) <b>Resolution:</b> 0.01 in (0.254 mm) <b>Accuracy:</b> 0.5% of reading or 0.125 in (3.2 mm), whichever is greater
<b>Pressure Depth</b>	<b>Operating Range Option:</b> 0 - 05 PSI up to 11.5 ft (3.5 m) 0 - 15 PSI up to 34.5 ft (10.5 m) 0 - 30 PSI up to 69 ft (21.0 m) <b>Resolution:</b> 0.01 in (0.25 mm) <b>Accuracy:</b> +/-1.0% of full scale

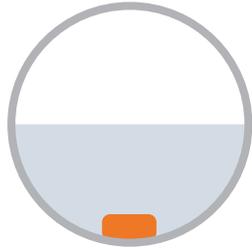


### Surface Combo Sensor

This sensor features four technologies including surface velocity, ultrasonic depth, surcharge continuous wave velocity, and pressure depth.

<b>Dimensions</b>	<b>Height:</b> 2.45 in (62 mm), <b>Width:</b> 2.03 in (52 mm), <b>Length:</b> 10.61 in (269 mm)
<b>Surface Velocity</b>	<b>Minimum air range:</b> 3 in (76 mm) from bottom of rear, descended sensor <b>Maximum air range:</b> 42 in (107 cm) <b>Range:</b> 1.00 to 15 fps (0.30 to 4.57 m/s) <b>Resolution:</b> 0.01 fps (0.003 m/s) <b>Accuracy:</b> +/-0.25 fps (0.08 m/s) or 5% of actual reading (whichever is greater) in flow velocities between 1.00 and 15 fps (0.30 and 4.57 m/s)
<b>Ultrasonic Depth</b>	<b>Minimum dead band:</b> 1.0 in (25.4 mm) from the face of the sensor or 5% of the maximum range, whichever is greater <b>Maximum operating air range:</b> 10 ft (3.05 m) <b>Resolution:</b> 0.01 in (0.25 mm) <b>Accuracy:</b> +/- 0.125 in (3.2 mm) with 0.0 in (0 mm) drift, compensating for variations in air temperature
<b>Surcharge Continuous Wave Velocity</b>	<i>When submerged, this technology provides the same accuracy and range as Continuous Wave Velocity for Peak Combo Sensor</i>
<b>Surcharge Pressure Depth</b>	<i>When submerged, this technology provides the same accuracy and range as Pressure Depth for Peak Combo Sensor</i>

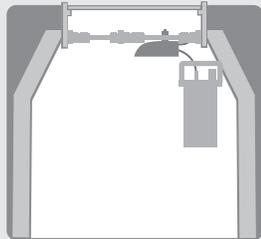
The **Ultrasonic Depth Sensor** version of this sensor specializes in depth measurement. This non-intrusive, zero-drift sensing method results in stable, accurate, and reliable flow depth calculation. Two independent ultrasonic transducers allow for independent cross-checking.



## AV|GATED®

This sensor combines proven depth measurement methods with state-of-the-art gated velocity measurement technology to provide accurate and reliable area-velocity measurements to calculate accurate sewer flow rate.

<b>Dimensions</b>	<b>Height:</b> 0.83 in (21 mm), <b>Width:</b> 1.50 in (38 mm), <b>Length:</b> 7.11 in (181 mm)
<b>Weight</b>	2 lbs (0.91 kg)
<b>Operating Temperature</b>	-4° to 140° F (-20° to 60° C)
<b>Operating Range</b>	<b>Ultrasonic Depth:</b> 1 in to 72 in (2.54 cm to 182.88 cm) <b>Pressure Depth (standard):</b> 0 in to 277 in at 10 psi (0 cm to 703.58 cm at 10 psi) <b>Velocity:</b> -20 fps to +20 fps (-6.10 m/s to +6.10 m/s); minimum depth for velocity = 5 in (12.70 cm)
<b>Accuracy</b>	<b>Ultrasonic Depth:</b> ±0.13 in (3.2 mm) or ±0.5% of flow depth; whichever is greater <b>Pressure Depth:</b> ±1% of full range <b>Velocity:</b> ±0.2 fps (0.06 m/s) or ±4% of average velocity; whichever is greater in uniform flow in velocities between -5 and +20 fps (-1.52 to 6.10 m/s)
<b>Resolution</b>	<b>Ultrasonic Depth:</b> 0.01 in (0.03 cm) <b>Pressure Depth:</b> 0.01 in (0.03 cm) <b>Velocity:</b> 0.01 fps (0.003 m/s)



## Long Range Depth Sensor

A narrow, powerful ultrasonic beam allows this depth sensor to perform well over long ranges. Integral Submersion Sensor provides detection of flooding at the point of interest.

<b>Dimensions</b>	<b>Height:</b> 4.22 in (107.2 mm), <b>Width:</b> 4.40 in (111.8 mm), <b>Length:</b> 9.15 in (232.4 mm)
<b>Long Range Ultrasonic Depth</b>	<b>Minimum Dead Band:</b> 0.0 in (0.0 mm) from the bottom of sensor housing <b>Maximum Operating Air Range:</b> 20 ft (6.1 m) <b>Beam Angle:</b> +/- 3° <b>Resolution:</b> 0.01 in (0.24 mm) <b>Accuracy:</b> +/- 0.25% of sensor range measurement or 0.13 in (3.2 mm) whichever is greater, in a homogeneous temperature air column <b>Drift:</b> 0.0 in (0.0 mm) <b>Temperature Compensation:</b> Additional compensation for variable temperature air column supported
<b>Submersion</b>	Detects submersion when fully covered with liquid



## INCLINOMETER

This sensor utilizes an integrated accelerometer to accurately determine the state of a flood gate's positioning in water control and management systems.

<b>Dimensions</b>	<b>Height:</b> 0.87 in (2.20 cm), <b>Width:</b> 2.03 in (5.16 cm), <b>Length:</b> 3.00 in (7.62 cm)
<b>Housing</b>	Solid molded ABS, high impact and abrasion resistant, fully sealed device
<b>Weight</b>	1.5 lbs (0.68 kg) including 25 ft communication cable and connector
<b>Operating Range</b>	0° to 90°
<b>Accuracy</b>	+/- 0.25 between 0° and 40°
<b>Resolution</b>	0° to 60° = 0.03° 60° to 90° = 0.3°
<b>Mounting Options</b>	Mount on flat surface of the wastewater side of closed flood gate, or a closed door or hatch for intrusion alarms Construction adhesive, stainless steel screws, zip ties, stainless steel clamp