

## MaxBotix Inc., Makes Inc. 5000 List For Second Time

Author: Kathy Kostal Date: 08-31-2016



Inc. Magazine Unveils 35th Annual List of America's Fastest Growing Private Companies—the Inc. 5000. MaxBotix Inc., Ranks No. 1752 on the 2016 Inc. 5000 with Three-Year Sales

Growth of 213%.  
[Click here](#) for full article.

## Raspberry Pi TTL Tutorial

Author: Cody Carlson Date: 08-02-2016



MaxSonar sensors offer a variety of outputs including TTL serial data. This tutorial guides you through the process of setting up your Raspberry Pi 3 with a MaxBotix sensor. [Click here](#) for full article.

## Packaging Options for the MaxSonar Sensors

Author: Scott Wielenberg Date: 07-26-2016



MaxBotix offers an expanded range of packaging options for many of our sensors. Each option provides unique benefits to certain mounting integrations. This article provides a brief overview of each option. [Click here](#) for full article.

# Protected vs. Non-Protected Environments

| Written By: Nicole Smith | DatePosted: 05-27-2015 |

## Key Takeaway

- How to distinguish between a protected and non-protected environment.

## Protected vs. Non-Protected Environments

When choosing an ultrasonic sensor it is very important to be aware of the surrounding environment. This is a key factor and the first consideration when selecting a sensor. This requires looking around the environment that your sensor will be exposed to which can be as simple as the outdoor elements or as complicated as the type of people or animals that will be in the environment with the sensor.

Consider whether you will be using the sensor during weather conditions that can damage the electrical components inside the transducer. We manufacture many sensors which can withstand harsh outdoor conditions. These sensors can also be used when a narrower beam is required, even inside the comfort of your own home. First, locate where the sensor will be placed and identify what can possibly come into contact with the sensor.

## Protected Environment Sensors

You should next think about moisture; will the sensor be exposed to moisture in any form? As seen in the Illustration 1, moisture coming into contact with the front face of the transducer can seep into the openings on all of our EZ/AE sensors, which can cause irreparable damage to the sensor. Dust and harsh handling of the sensor as well have the potential to impact ranging and possibly cause damage. Another consideration for "Protected Environment" sensors are, who will be touching or interacting with the sensor. A harsh tapping on the front face of the sensor (common with young children) can cause damage. The EZ/AE sensors and all open-faced transducers are examples of "Protected Environment" sensors. Ensure that your application is suitable if you choose to use a sensor for protected environments. Being aware of the sensor surroundings ensures that the sensor meets the 200,000+ MTBF hours that these sensors are known for.



Illustration 1: Indoor Sensor

## Non-Protected Environment Sensors

Considerations for the WR (weather resistant) sensors is much more lax. As seen in Illustration 2, the closed-face transducer, which only has the aluminum portion of the transducer exposed, allows for the IP67 weather resistance that outdoor elements may require. If you are only planning on using the sensor in fair weather conditions you may not need the IP67 rating, but you may want the more narrow beam width that the WR sensors provide. When dust, moisture, or harsh handling of the sensor is unavoidable, one of our WR sensors is ideal for your application. The IP67-rated sensors can also handle harsh chemicals or can be paired with a chemical resistant seal such as the F-Option for environments where diesel fuel or corrosive gases are present.



Outdoor Sensor

As seen in Illustration 3 we offer many of the WR sensors in a variety of housings styles including pipe threading for applications with specific mounting requirements. If you are working in a "Non-Protected" environment this gives you the option to select the sensor housing that best fits your needs.

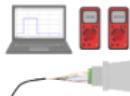
Once the environment is known, choosing the perfect MaxBotix sensor is simple and easy. You can then categorize it as "Protected" or "Non-Protected" and choose the corresponding option from our Sensor Selection Guide to find the sensor that fits your application needs. If you are still unsure of the sensor that is right for you, contact us and we will be happy to help. Your perfect sensor is just a click away!



Illustration 3: IP67

## The MaxBotix RMA Process Guide

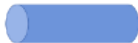
Author: Scott Wielenberg Date: 07-18-2016



When providing support, our technical support team may determine that further testing at our facility is the best way to help resolve the issue that you are facing. At this point, they will start the Return Merchandise Authorization (RMA) process. This article will explain what you can expect as your ultrasonic sensor travels through our RMA process.  
[Click here](#) for full article.

## Important Considerations for Using an Ultrasonic Sensor Inside of a Pipe

Author: Scott Wielenberg Date: 07-11-2016



Many customers have requested the option to mount an ultrasonic sensor in a pipe. During the testing and development cycle, we discovered a number of considerations and requirements that must be met for the application to be successful. When all of these are met, a user may be able to achieve the desired level of success for measuring the liquid level inside of a pipe.  
[Click here](#) for full article.

## Grand Opening of Facility Expansion

Author: Jenney Grover Date: 06-28-2016



On April 19th, we welcomed our supporters to join us for the Grand Opening of the Build Out. Bob and Nita Gross gave a tour of the build out and their vision for the space. We continue to be in awe of the support from our community, our employees, our distributors, and our customers. Thank you for the many years of support, and we look forward to serving you in the years to come.  
[Click here](#) for full article.

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