

Buying a Decagon system

The control sensor networks that we have described above have been commercialized by Decagon Devices, Inc. (www.decagon.com). However, Decagon ONLY sells equipment through a network of distributors and consultants, since they are an equipment supplier, and do not have the expertise to handle installation and support of a wide range of crops and production situations. Hence, they rely on consultants to provide that information directly to growers, as experts in those specific crops or agricultural sectors. There are a number of benefits in this business model for you as a grower, as discussed below.

Benefits of a consultant network

A consultant should be able to advise and customize a system for your operation, taking into account your needs, current and future growth, and how you plan on using the information from a sensor network. Since consultants should be familiar with the many different types of sensors and nodes combinations, they can help you find the most cost effective and useful configuration for your particular situation. Consultants will also show you how to use the hardware and software, which can reduce time and energy involved in getting the system up and running. Consultants typically also offer installation services, which can get you up and running within a few hours, since they are familiar with, not only what sensors to use, but where to best place them (see the learning modules on variability). Having set up many networks, they can also troubleshoot problems more effectively. Lastly, a consultant can demonstrate value to the grower by advanced sensor data analysis packages, to illustrate where practices are already efficient, but also highlight areas for improvement. Good consultants will integrate their experiences from other operations and add value to your operation, by passing that knowledge on to you.

What to look for in a consultant

There are a number of different factors to consider when contracting with a distributor/consultant. First and foremost, it is important to hire someone who has a demonstrated knowledge of Decagon equipment, and who you feel confident can design a system that fits your needs. Typically a consultant should provide you with examples of prior installations and how those installations have provided a reasonable return on investment. Purchasing the correct equipment is essential for the sensor network to function as expected. In addition, make sure that they are able to provide you with the level of installation of equipment and training on the software (and hardware as necessary) to be able to effectively use the sensor network. Training should be a part of any sensor installation package. If required, a consultant should also be able to provide additional services such as maintenance, monitoring and advanced consultant services. These additional services would vary depending on the size and type of operation you own and the level of additional expertise you require.

Determining your payback period

The value you derive from a sensor network is determined by the size and complexity of your operation, the number and type of nodes and sensors you purchase, and how you use the information from the network to make decisions about your operation.

In order to help you evaluate the benefit of a sensor network for your operation, we have created an excel spreadsheet that will be discussed in the [return on investment](#) learning module. There you can enter information about your operation, and the type of sensor network that you would be interested in etc. Based on the information you provide, the spreadsheet will help you make an informed decision about the benefits of a sensor network at your operation.