Getting Started

How many and the types of nodes and sensors you purchase is dependent on a number of factors such as the size of your operation, the diversity of the plants that you grow and how much of your revenue comes from higher value crops etc.

You can start with a small network (2-4 nodes), depending on the type of node and sensors you choose. You can use this network to evaluate the system, and decide if it benefits your operation. Based on our experience with a number of growers in a variety of situations (from continuous greenhouse production, to container, to pot in pot to field production) sensor networks have provided a number of benefits to growers.

After evaluating a system, you may want to expand your system, redeploy some nodes and sensors to another crop or field, or decide that is does not benefit you enough to keep it. If you decide to expand your system, the additional cost will be just for additional nodes and sensors, since the initial investment in the computer, base station and software can be used for these additional nodes as well. One of the benefits of sensor networks are that a node and sensors can be used to answer a specific question (for example, am I over irrigating this species), and then when enough information has been gathered to answer that question, that node can be redeployed elsewhere, adding value to the senor network purchase.

Scaling sensor networks

Since the same base station, software etc. can be used on any number of nodes, it is recommended that sensor networks should start out small, installing a few nodes at the operation. Starting small allows you to build confidence in the sensors, and how you use them to make decisions, while reducing your initial capital costs. Once you feel more comfortable with the data that the sensor networks provide, and your ability to use this information to make decisions (or setting up the node to control itself), you can expand your sensor network. Since nodes and sensors can easily be moved from one location to another, a small network can be reconfigured based on your needs.