

Field deployment of sensors

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- I. Understanding sensor data sheets
 - A. Geometric characteristics
 1. Field of view (FOV)
 2. Weight, dimensions and support brackets
 - B. Signal update
 1. Fixed speed (configurable or set)
 2. Variable speed (signal strength dependent)

- II. Field deployment of sensors
 - A. Geometric considerations to sensor position in frame
 1. Reference to GPS antenna
 2. Vertical and horizontal offset
 3. Optimize sensor vertical placement (based on FOV, and row spacing)
 - a) Of sensor suite
 - b) Of individual sensors
 - B. Spatial resolution
 1. Relationship between ground speed and sampling frequency

References

Andrade-Sanchez, P., Gore, M.A., Heun, J.T., Thorp, K.R., Carmo-Silva, A.E., French, A.N., Salvucci, M.E., White, J.W., 2013. Development and evaluation of a field-based high-throughput phenotyping platform. *Functional Plant Biology*. Vol. 41 No. 1. 68 - 79