

ONE AgriTech Programme

Evaluation of New Technology

Technology assessed: AgOpen GPS (Highland Autosteer) by The Masson Family, Chapelfield

AgOpen GPS is a free, open-source precision agriculture software package that provides advanced tractor guidance, autosteer, and section control for a wide range of agricultural applications. As an open-source system, the software is freely available for anyone to use, modify, and develop. Originally developed by Canadian farmer Brian Tischler, it has grown into a global, community-driven project focused on delivering high-accuracy GPS guidance at a significantly lower cost than commercial alternatives.

The system enables farmers to build and operate their own GPS base stations for RTK correction signals, as well as install tractor-mounted hardware kits that provide precise guidance and steering control. While the software itself is free and open source, additional hardware is required to integrate the system with a tractor and achieve full functionality.

Criteria	Score (1-5)	Comments
Ease of Use	4	We have our own base station on the farm to provide GPS correction for our tractors. We built it using the Ag Open GPS forum which shows you step by step what you need to do to build the system. You can buy them pre-built as well. Once built the system is extremely easy to use and there is a lot of guidance online through the AgOpen community.
Reliability	5	No real problems so far and parts are cheap and easily accessible for fixing things.
Value – what are the benefits?		• No annual subscription for GPS correction signal • Cheap to set up compared to other systems • Loads of information online and an excellent community to help resolve any problems.
Any drawbacks?		• Still need a sim card for the tractor to receive the correction signal but can be a cheap one for data only. • No main dealer/Tractor dealer backup although Highland Autosteer specialises in AgOpen. • Need to have a basic knowledge of computers to get things set up. Not so important if using Highland Autosteer • Need for specialist input or at least some guidance – again we used Highland Autosteer to switch existing systems to own base station. However, the AgOpen community has a wide base of knowledge and experience and could have provided solutions.
Effectiveness – delivered what anticipated?	5	Correction signal is dependable and accurate with a wide coverage area. Good community input and the option to link with other people's base stations if necessary.
Value for money?	5	Excellent value for money compared to other commercial correction signals. No cost on an annual basis. On par with commercial signals and all under our own control.
Overall Assessment	5	Really pleased with this investment and how it has performed. Better value for money than commercial signals and reliable performance in the field.