AGRIPLAN INTRODUCES NEW PRODUCTS FOR PRECISION FARMING AND GIN CONTROL

Mike Gvili
Agriplan Inc.
Stow, MA

Abstract

This paper highlight the new products and capabilities of Agriplan's second generation of cotton yield monitors and precision farming products. This line offers simple operation at significantly lower cost when compared to previous years offerings. Agriplan has also adapted the cotton flow sensor for operation in cotton gins.

Introduction

Agriplan Cotton Yield Monitor have been in use since 1997. The week cotton prices combined with relatively high system cost, (near the $10,000 mark with DGPS and software) has kept the number of user below expectations. This year Agriplan is introducing the second generation of products priced significantly lower and provide simple automatic operation for farm equipment operators who shy away from the use of electronic equipment.

An optical cotton flow sensor is being offered for the first time for gin monitoring and control.

New Generation of Products

- New Yield Monitor Uses Palm PC for display and storage
- New DGPS model, small, satellite base performance under $1,000
- New Professional yield maps processing software with batch processing and calibration capabilities
- Improved yield sensor for cotton strippers
- New lint flow monitor for gins

Model 850 uses Palm PC for Display and Storage

Agriplan Model 850 is the new generation of yield monitors. This newest and lowest cost system is unique. It combines a ruggedized Palm PC† with newly designed AGRIPLAN sensor interface. This new AG850 is the simplest yet most versatile Cotton Yield Monitor offered for under $5,000. The system is offered with a DGPS receiver / dome and PC mapping software.

WAAS DGPS ($990.00)

A stand alone DGPS (differential GPS) receiver using the Wide Area Augmentation System for differential correction. This relatively new FAA developed system is now in full operation and it provides satellite differential without subscription charges. The WAAS DGPS provides continuous coverage in the North American continent, with measured accuracy similar to existing DGPS receivers of approximately one foot.

Agriplan Mapping *Professional*

The professional package to be released this spring provides utilities to help automate and simplify field map processing of multiple fields and multiple pickers/strippers. The package perform batch processing, combines multiple files into a single field, and post-calibration of monitors.

Lint Flow Monitor for Gins

A new design using a cotton flow sensor for gin monitoring and control. The sensor is utilizing electro-optic technology. The sensor combines emitters and detectors mounted on the lint conveyers. As the cotton passes through the conveyer it is illuminated by infra red light of the emitters. The detectors which are positioned across the conveyer detect light pulses. The pulse count is proportional to the volume and density of the cotton. The flow rate information is processed in real time to produce a sensing and controlling signal s(or data and command strings) for the gin machinery. This technique enables operators of the gin improve on the efficiency and throughput of the facility.

References

Mike Gvili, 1998 Yield monitor for cotton pickers; Beltwide cotton conference 1998.

Agriplan Inc. web page: www.agriplaninc.com/products/news.htm, 2001.

Mike Gvili, 2001 Cotton Flow Monitoring System for Gins, Beltwide cotton conference 2001.

Mike Gvili, et. al.; 200;1 Stripper Cotton Yield Sensor Produces Yield Map; Betwide cotton conference 2001.

Figure 1. Yield monitor model 850 uses Palm PC for data display and collection.

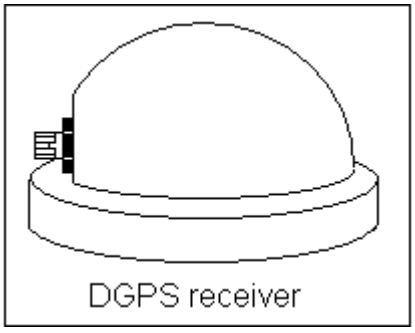

Figure 2. WAAS DGPS receiver, under $1K.

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Figure 3. Lint optical flow sensor for gins.