Specifications

Function
Field analysis of whole grain for protein, moisture, and oil.

Includes
- PDA
- PDA Memory Card
- Software
- Calibrations
- GPS Locator
- Mounting Template

Optical Capabilities
- Measurement Mode: Diffuse transmittance
- Spectrum Range: 14 filters covering wavelengths from 893 to 1045 nm
- Optical Range: 0 to 6 AU
- Resolution: 0.00001 AU
- Stability: 0.05 Milli-AU
- Measurement Time: Variable (Typically 12-15 seconds)
- Measurement Data: Log 1/T value; 14 primary wavelengths

System Capabilities
- Data Transfer: Via SD Memory Card on Data Logger
- Calibrations: Standard Calibration: HRS wheat. Capacity to store up to ten (10) calibrations
- Temperature Compensation: Built-in: Instrument 0° - 45° C (32° - 110° F) Sample -10° - 50° C (20° - 120° F)
- Outputs: RS-232

Sample Information
- Sample Size: 300 grams (approximately)
- Sample Pathlength: Adjustable (15-25 mm)
- Sample Preparation: None required
- Sample Destruction: None
- Measurement Range: from 1.0% to 95%

Physical Data
- Dimensions: 23” X 11” X 7”
- Weight: 27 lbs.

Installation Data
- Power Requirements: 12 Volts DC on clean power line
- Power Consumption: 10 amps max

Other Zeltex Products
ZX-50 Near-Infrared Portable Grain/Food Analyzer
- In-field measurement of protein, moisture, oil, and other constituents
- Uses (6) 1.5 V “AA” batteries
- Measures large 100 gram samples and concentrations from 1.0 to 95%
- Displays results in under one minute
- Whole grain analysis - no grinding and little or no sample preparation necessary
- Optional printer, aluminum carrying case, data analysis software, and up to eight additional calibrations - three constituents each
Everything You Need To Equip Your Combine With The Industry’s BEST On-Combine Protein, Moisture, and Oil Analyzer

The AccuHarvest is designed to help today’s precision farmer increase quality and increase profits.

The industry’s first commercial on-combine grain analyzer can be fitted on to any combine.

The AccuHarvest includes:

• The patented sample analysis system that mounts on your combine’s clean grain elevator
• A custom DataLogger to collect and record all data from the AccuHarvest.
• A GPS tracker to mount on top of the combine to allow precision field mapping

How Does it Work?
The AccuHarvest automatically samples grain four to five times per minute (on average) as you harvest. The AccuHarvest’s patented sampling technique provides you with accurate, real-time grain analysis while your combine is moving through the field.

Protein, moisture, and oil are displayed and saved on the DataLogger that is located in the cab. During harvesting, the data is saved on an SD Memory Card for quick and easy downloading to a PC for further analysis.

Calibrations Are Available For:
- Wheat
- Barley
- Corn
- Soybeans

How Does It Work?

Diffuse Transmittance
Light energy that enters a product is scattered and absorbed within the product. The AccuHarvest analyzes the spectra that exit from the products and measures constituent concentrations.

Increase Quality...
...Increase Profits

The New Reality for Precision Farming

Until now, profitability has been the promise of precision farming. The AccuHarvest makes that promise a reality.

• Segregation of crops by quality is now a reality. The AccuHarvest will display the average value of the bin for protein, moisture, and oil.
• Fast, efficient protein mapping is a reality. Field mapping of protein allows the most efficient use of fertilizer for next year.
• Real-time analysis of your grain is a reality. Enables you to harvest for best segregation and quality.

Optional Mapping Software

The optional Farmworks® Software allows you to map your fields to determine where you are getting the best protein, moisture, and oil as you harvest.

Tracking and mapping the grain quality from this year’s harvest allows you to use nitrogen more efficiently for next year’s planting to further improve the quality and profitability of your harvest.

Comparison of Lab Protein vs. AccuHarvest Protein

Protein Maps of a North Dakota Field

Lab Results

AccuHarvest Results