

# CropScan

## Loren1000G On Farm Analyser

The CropScan Loren 1000G On Farm Analyser is designed to provide farmers with a reliable means of measuring protein, moisture and oil in wheat, barley and canola. The CropScan Loren 1000G uses a diode array spectrometer to scan the wavelength region, 720-1100nm. Within this region of the NIR spectrum, protein, moisture, oil and starch absorb NIR energy. Light from a tungsten halogen lamp is passed through a sample of grain. The light is dispersed across a silicon photodiode diode array detector to produce a NIT spectrum. The amount of light absorbed across the NIT spectrum is proportional to the concentration of the protein, moisture, oil and starch. Grain is poured into the funnel where it is metered through the optical chamber. The NIT spectra are collected and the average of 10 spectra is used to compute the percentage protein and moisture or oil and moisture in the grains. The grains fall into the sample cup at the bottom of the analyser.



*Australian designed and manufactured*

The CropScan Loren 1000G can be run from a 12VDC car battery or 110/240VAC mains power. The system is housed in a rugged urethane case. An optional carry case is available.

Features	Benefits
NIR Transmission Technology	Same NIR technology as used by AWB, Graincorp, CBH and ABB
Flow Through Sampling System	Rapid and simple to use
Solid State Optics	Rugged, stable and compact
Four Button Keypad	Simple to use.
Built-in Autocalibration Software	Calibration adjustments can be performed using a single test sample.
Internal Computer, Keyboard, LCD	Stores up to 6 product calibrations and displays 2 constituents onto a LCD
RS232 Serial Port	Provides a convenient method of downloading calibrations to the instrument
Transportable	Suitable for use in a ute, a tractor or combine and in the farm house
Specifications	
Scan Range	720-1100nm
Constituents	Protein and Moisture, Oil and Moisture
Pixels	38
Scan Speed	1-2 seconds per pixel, 30-60 seconds
Power	110/240VAC, 12VDC
Weight and Dimensions	8Kg, 220mm(W) x 330mm(D) x 230mm(H)