PhytoScan™ Systems

Natural Product Screeners

Assure consistency, improve profitability

PhytoScan analyzers are the first and finest constituent screeners designed specifically for the needs of the nutraceutical and functional food industries. Requiring little or no sample preparation and only minutes of elapsed time, PhytoScan systems can provide moisture determination, relative concentrations of active components and best of all, lot-to-lot consistency. The NIR spectrometer at the heart of the PhyScan system has proved its worth for years throughout the food and pharmaceutical industries – determining dextrose equivalence, moisture in chopped flora, concentrations of vitamin intermediates during synthesis – simply and easy.

Easy to use, easy to own

The PhytoScan monitor line is a family of modular instruments for the best possible match to user needs. Acquire what you need, expand later, add capabilities and still preserve your budget. PhytoScan systems require the lowest capital investment in the burgeoning food and nutraceutical NIR world: even the most extensive system configuration is priced well below other "bare-bones" NIR systems. Each system includes LT Industries' LTVista software -- truly point and click operation right at the test sample.

The PhytoScan system with a Large Area Rotating Sample Averager.

The basic system

A PhytoScan material monitor includes a rugged NIR spectrometer, a 2-meter fiber optic cable, a remote testing probe, LTVista software, remote modem diagnostic package and manuals. Add a computer and this system is ready for work.

PhytoScan/SPX™

LT Industries' SPX technology adds parallel data processing to the PhytoScan system. This sophisticated electronic package allows system expansion over long distances and expands system capability for use with VISTA Software for NIR Analysis™ -- a Microsoft Windows®-based program compatible with GRAMS/32 AI and PLSPlus IQ software packages.

Spectrometer Specifications (Basic Unit)

Reliability:	Designed for twenty-four hour operations without shut-down.
Spectral range:	1200 - 2400 nm
Scanning speed:	2.5 scans per second
Spectral addition:	Scans may be added under computer control
Measurement modes:	Reflectance, Transmittance, Transflectance
Data interval:	1 nm (1200 points over the spectral range)
Bandwidth:	10 nm
Photometric range:	5 Absorbance Units
Photometric noise:	< 40 µAU, 15 µAU typical (0 AU absorber, 50 scans averaged)
Wavelength accuracy:	<0.015 nm
Wavelength repeatability:	0.01 nm
Stray light:	0.1% or better
Light geometry:	Optimized for minimum specular reflectance and maximal S/N
Auxiliary port:	Computer controlled for alternative sampling
Possible signal output:	Multiple 4-20 mA, multiple voltages
Power:	120V, 3.5 Amp, 60Hz or 220V, 1.8 Amp, 50 Hz
Power transients:	Filtered
Dimensions:	12" x 15" x 13" (HWD) 30.5 cm x 39.7 cm x 34.9 cm (HWD)

Specifications subject to change without prior notification

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