BIOSPECTRIX PVT LTD

BioSpectrix

NIR Analyzer – BSNIR-1810

Precision • Performance • Reliability



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NIGS 1810 is the brand-new grating-based near-infrared analyzer launched . Adopting holographic digital grating dispersion and a cooled InGaAs sensor, it performs full-spectrum detection and accurately acquires the NIR information of any sample. The open, non-contact rotating sampling mode delivers component results in only 10 seconds. Widely used in plant breeding, flour milling, grain procurement, food processing and feed purchasing.

Product Features

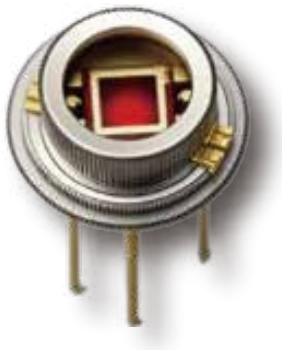


High Precision & Reliability

High-precision servo motor drives the sample turntable, controlling speed and position accurately to guarantee repeatability.

High Sensitivity & Low Noise

High-performance cooled InGaAs detector – high sensitivity, low noise, unaffected by ambient temperature.

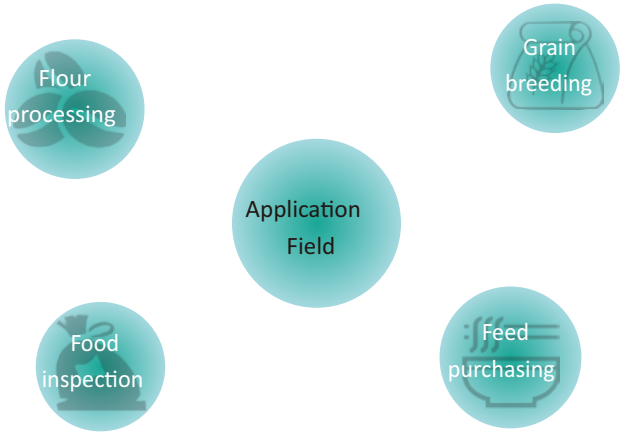




Long Life & Excellent Stability

High-performance halogen-tungsten light source with10000 h lifetime and stable output, reducing maintenance frequency.

Each unit contains traceable reference material for wavelength calibration, ensuring excellent consistency among instruments.



Model Database

Wheat grains	Moisture, crude protein, wet gluten, hardness, sedimentation value, fatty acid value
Wheat flour	Moisture, crude protein, ash, wet gluten, water absorption, sedimentation value
Soybean (kernel)	Moisture, crude protein, crude fat
Paddy (head rice)	Moisture, crude protein, amylose, gel consistency
Milled rice	Moisture, crude protein, amylose, eating quality
Maize (kernel)	Moisture, crude protein, crude fat, starch
Cottonseed	Moisture, crude protein, oil content
Rapeseed	Moisture, crude protein, crude fat, glucosinolate, erucic acid
Grower-finish feed	Moisture, crude protein, ash, Ca, P, salt, crude fat, crude fibre
Soybean meal	Moisture, crude protein, ash, crude fat, crude fibre
Wheat bran	Moisture, crude protein, ash, crude fat, crude fibre
Rice bran	Moisture, crude protein, ash, crude fat, crude fibre

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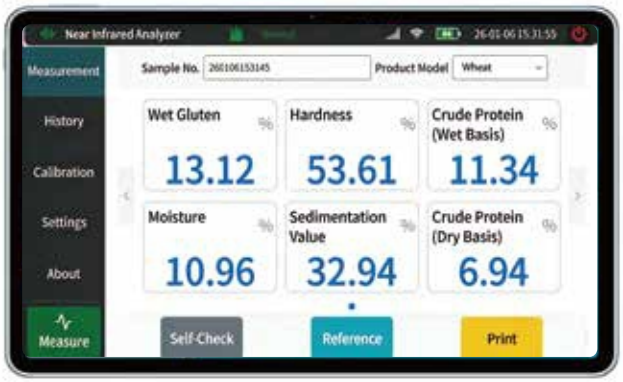
Operating Software

Windows Client

Modern GUI, one-click measurement.

Modules: device info, result & spectrum review, history export, model management, user-role management, help centre.





Android App

Install on phone or tablet.

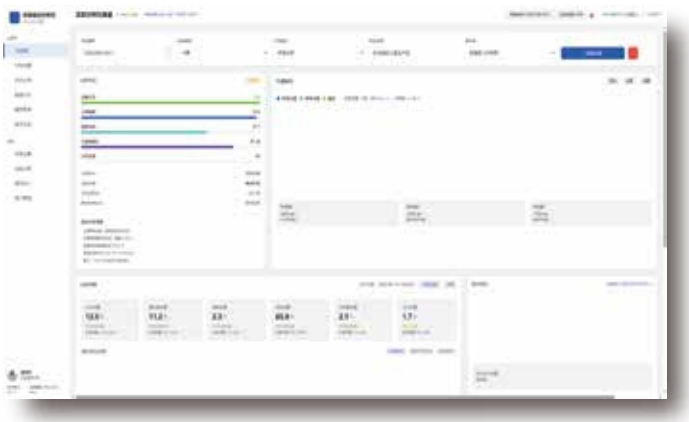
Bluetooth connection – no cables.

Functions: measurement, model management, device info, one-click report generation, share via social apps.

Web-based Cloud Platform

Remotely monitor all binded NIR units.

Query history, device status, model versions – anytime, anywhere.





Instrument Parameters

Parameter	BSNIGS 1810	BSNIGS 1810
Analysis time	10 s (adjustable)	
Measurement mode	Diffuse reflectance / Transflectance	
Wavelength range	1000-1800nm	
Spectral bandwidth	10-12nm	
Wavelength accuracy	≤0.2nm	
Wavelength repeatability	≤0.05nm	
Stray light	≤0.1%	
Absorbance noise	≤0.00005AU	
Data interface	RS232	RS232& Bluetooth
Positioning	None	BeiDou Positioning
Battery	None	6 h autonomy
Operating temperature	0–40°C	
Operating humidity	5-85%	
Power supply	12Vdc	
Power consumption	15 W (main unit)	
Dimensions	LxWxH:240mmx300mmx230mm	
Weight	8kg	9kg

