

MDS-JHW100

Near-infrared online component analyzer



1. Advantages & Features

1. Real-time online analysis with millisecond-level rapid response.

Utilizing industrial-grade online design, it can be directly integrated into the production line, enabling 24/7 continuous monitoring. Requiring no manual intervention, it performs real-time multi-component analysis in milliseconds, significantly improving production efficiency and meeting the needs of most industrial scenarios.

2. Multi-form compatibility to adapt to complex working conditions.

Whether the material is granular, powdered, paste-like, or liquid (transparent or containing suspended particles), the UD66 can reliably detect it. With an IP65 protection rating, it is resistant to high temperatures and dust, perfectly suited for various harsh industrial environments, providing a one-stop solution for complex sample analysis challenges.

3. Superior precision drives intelligent decision-making

Equipped with a high-sensitivity InGaAs detector and a proprietary optical system, combined with dynamic calibration technology, it ensures high detection accuracy even during long-term operation. Real-time data linkage with the PLC system provides precise information for process optimization.

2. Device parameters

Optical properties	Spectral range	900nm~1700nm
	Wavelength accuracy	<0.05nm
	Wavelength stability	<0.2nm/year
	Noise	≤0.00003AU
	Working light source	Halogen lamp, lifespan >10,000h, optical power output, drift ≤5‰/h, stabilization time <1min, user-replaceable
	Beam spot diameter	≥100mm
	Calibrated light source	Xenon lamp, lifespan >3,000h, stabilization time <1min
	Calibration interval	6min (adjustable based on site conditions)
	Working distance	250±100mm
	Absorbance repeatability	<0.0004AU
	Spectral acquisition rate	>30 times/s full spectrum data acquisition

Installation and Deployment	Installation method	Secured to a 38mm diameter steel pipe support using a clamp, allowing for installation at any angle.
	Working environment	Operating temperature: (-10~40)°C Relative humidity: 30-90%
	Data interface	Network cable interface output, supporting simultaneous connection and data acquisition from multiple devices.

Operating Environment	Operating platform	Windows, Winserver
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Dimension	Host Size	≤400*270*160 (mm)
	Host Weight	<15kg

3. Application

Oil and fat industry

This service can analyze major oil-pressing raw materials such as soybeans, peanuts, cottonseed, rapeseed, sesame seeds, rice bran, and germ, as well as the corresponding oilcakes and oils. It can also test intermediate products in the oil-pressing process, such as oilcakes, soybean hulls, germ flakes, and kernels.

Measurable components: Moisture, protein, fat, crude fiber, ash, iodine value, acid value, peroxide value, etc.

Food industry

Snack foods, functional foods, dairy products, meat products, etc.

Measurable components: moisture, fat, salt (seasoning powder), protein, sugars, fiber, starch, etc.

Corn starch industry

Testing of corn starch, corn protein powder, corn husk powder, corn germ, and various corresponding intermediate products, such as concentrated liquid, wet fiber, wet germ, etc.

Measurable components: moisture, protein, fat, ash, crude fiber, starch, dry matter, etc.

Animal feed and pet food industry

Feed ingredients, complete feed, premixes, pet food, fish meal, etc.

Measurable components: moisture, protein, fat, fiber, amino acids, ash, calcium, phosphorus, etc.

Fermentation industry

Bio-fermentation products, amino acid fermentation products, yeast, lactic acid bacteria, etc.

Measurable components: various main fermentation products, ammonia nitrogen, total sugar, reducing sugar, oil content (for fermentation using oil as a carbon source), etc.

Chemical Industry

Various chemical products such as polyurethane, PVC, EVC, acrylic fiber, spandex, etc.

Measurable components: hydroxyl group, carboxyl group, acid value, moisture content, alkanes, pour point, etc.

Tobacco industry

Raw tobacco, re-dried tobacco leaves, cut tobacco, cigarettes, etc.

Measurable components: moisture, nicotine, total sugar, reducing sugar, total nitrogen, chlorine, potassium, etc.

Sugar Industry

Sugarcane pulp, sugarcane bagasse, beet pulp, beet bagasse, raw sugar, etc.

Measurable components: Brix, Pol, sucrose content, fiber, purity, etc.

Other applications

Grain procurement and pricing, grain storage and processing, brewing industry, biofuels, textile classification, etc.