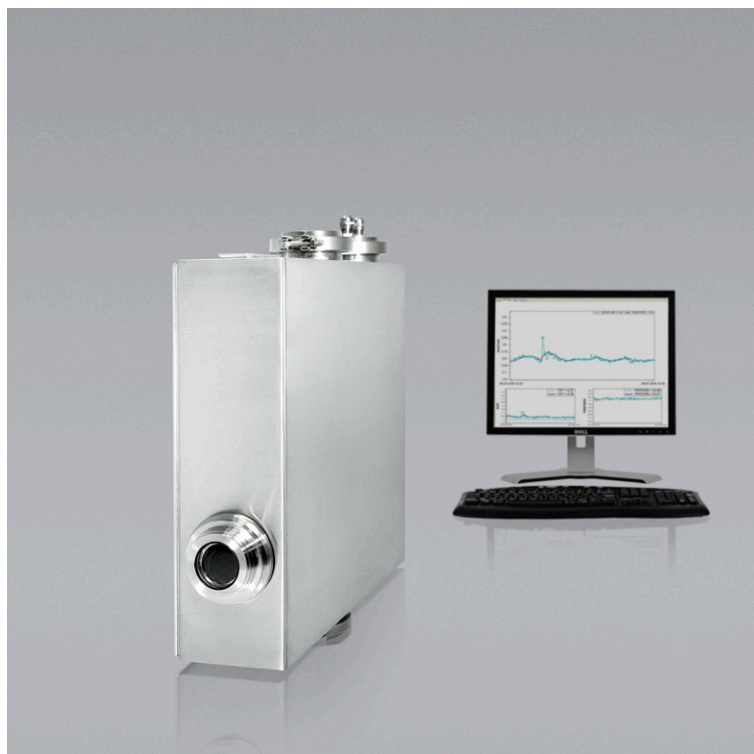


ProFoss™

In-line process analysis in the feed industry



ANALYTICS BEYOND MEASURE

ProFoss™ increases profit in feed production with continuous analysis, directly in the process line without bypass.

Streamline your feed production with in-line analysis

Get complete control of your feed production with a continuous flow of real-time results. Installing ProFoss in or right after the mixer enables you to measure critical key parameters such as protein, fat and moisture and make timely adjustments to meet specified final product quality.

Produce closer to targets to increase profit

Increase your profit opportunities with real-time measurement. For instance, more accurate moisture control reduces raw material cost. By moving moisture targets 0.5% closer to specification, a feed manufacturer producing 100,000 tons of feed annually can produce the same amount of feed using 500 tons less raw material. In addition, real time results lead to improved product consistency, reduced rework and energy savings.

Improve your business with accurate control

The continuous flow of results provides full traceability, alerts if products are out of spec and enables you to deliver a consistent high product quality that meets the demands of your customers.

Product types

Feed raw materials, feed mash, feed pellets, feed ingredients in different feed product types such as broiler feed, layer feed, aqua feed, dry pet food, etc.

Parameters

Moisture, protein, fat, fibre

Technology

High resolution NIR diode array (DDA) technology installed directly into the process line without bypass

Installation

At raw material intake, in the mixer or right after the mixer, after the dryer and at the final product loading

Specifications

Light source lifetime	Dual lamp system = 12,000 hour average lamp time
Software package	ISIScan™ Nova for instrument control
Wavelength accuracy	0.5 nm
Wavelength precision	< 0.02 nm
Wavelength stability	< 0.01 nm/°C
Noise	< 60 micro AU
Random vibrations	0.4 grms at 10 – 150 Hz according to IEC 60068-2-64 0.4 grms at 10 – 1250 Hz according to FOSS internal standard (more information available on request)
Temperature	-5 – 40°C (23 – 104°F). With purge -5 – 65°C (23 – 149°F)
Installation in ATEX zone	0 – 40°C (32 – 104°F). With purge 0 – 65°C (32 – 149°F)
Purge air	Flow rate minimum 5 l/min, > 99.9% water free, > 99.9% free of oil and fine particles down to 0.3µm
Ambient humidity	10 – 90 % relative
Dimensions	(w × h × d): 42 × 42 × 13.5 cm (16.5 × 16.5 × 5.3 inches) + brackets to hold the unit
Weight	25 kg / 55 lbs
Cabinet	1.5 mm (lid 2.5mm) stainless steel EN 1.4301 (SS2333)
Protection	IP69K* according to IEC 60529 and DIN 40050 part 9, NT ELEC 023
Communication	KepServerEX (Ethernet, OPC 4-20 mA, Profibus/Profinet) to PLC/SCADA; FossManager™
Power supply	Recommended isolated or conditioned line power 100 – 240 VAC, 50 – 60 Hz, 2.0 A, 150W

* IP69K is the highest protection for dust entering the unit. IP69K means protected against the effect of high-pressure water and/or steam cleaning at high temperature.

ProFoss Reflection	
Analysis time	5 - 50 ms / integration time; average time per result 3 - 15 seconds
Measurement mode	Reflectance
Wavelength range	1100 – 1650 nm
Detector	InGaAs diode array
Spectral dispersion	1.1 nm / pixel

FOSS

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