

SCIENTA ONLINE NIR SENSORS FOR SURFACE OR TOTAL MOISTURE



- ✓ Non-contact, single sided online measurement
- ✓ Real-time, state-of-the-art spectral analysis
- ✓ Moisture measurement also at high moisture levels
- ✓ More accurate online measurements using large optical components



MEASURING METHOD

The Scienta NIR absorption-based sensor series 7230 is a double sided, 2-channel or 4-channel InGaAs detector-based Moisture weight sensor for online use. The sensor measures the infrared light absorbed by different wavelengths caused by the water on sheet. This signal is digitalized and linearized to correlate to real weights in engineering units. Moisture range is 1 – 35 %. Paper weight range is 5..350 g/m².

BENEFITS

to process applications such as resin impregnation, corrugated board warp control & pulp drying water management, laminating, paper surface moisture etc.

- No radioactive source is required
- Non-contact measurement
- Service free construction
- Easy and convenient to install and operate
- Full range of scanners available
- Easy calibration and setup
- More accurate on-line measurements
- Faster on-spec quality and reduced start up waste
- Reduction in rejects due to high performing measurements
- Minimization of energy consumption by accurate and reliable moisture and coat weight measurements and controls
- Machine speeds can be increased on drying limited pulp and paper machines
- Spectrometer with 128 channels available

TECHNICAL SPECIFICATIONS

Sensor Type	7230-2	7235-2
Construction	Double sided	Single sided
Meas Channels	2, 4, 128	2
Moisture Range	5 – 350 gms, 1 – 35 %	1 – 70 %
Accuracy	0,1%	0,2%
Repeatability	0,01%	0,01%
Recommended Measurement Gap	13 mm	100 mm
Power	+24V, 1A	+24V, 1A
Installation	Scanning/Fixed	Scanning/Fixed

Sensor Type	7230-2	7235-2
Ambient Light Sensitivity	None	None
Interface Options	Profibus	Profibus
	Modbus	Modbus
	Ethernet	Ethernet
	USB	USB
	2 x analog	2 x analog
Environmental Conditions	10-60 °C 10-95 % RH	10-60 °C 10-95 % RH
Liquid Cooling	Optional	Optional